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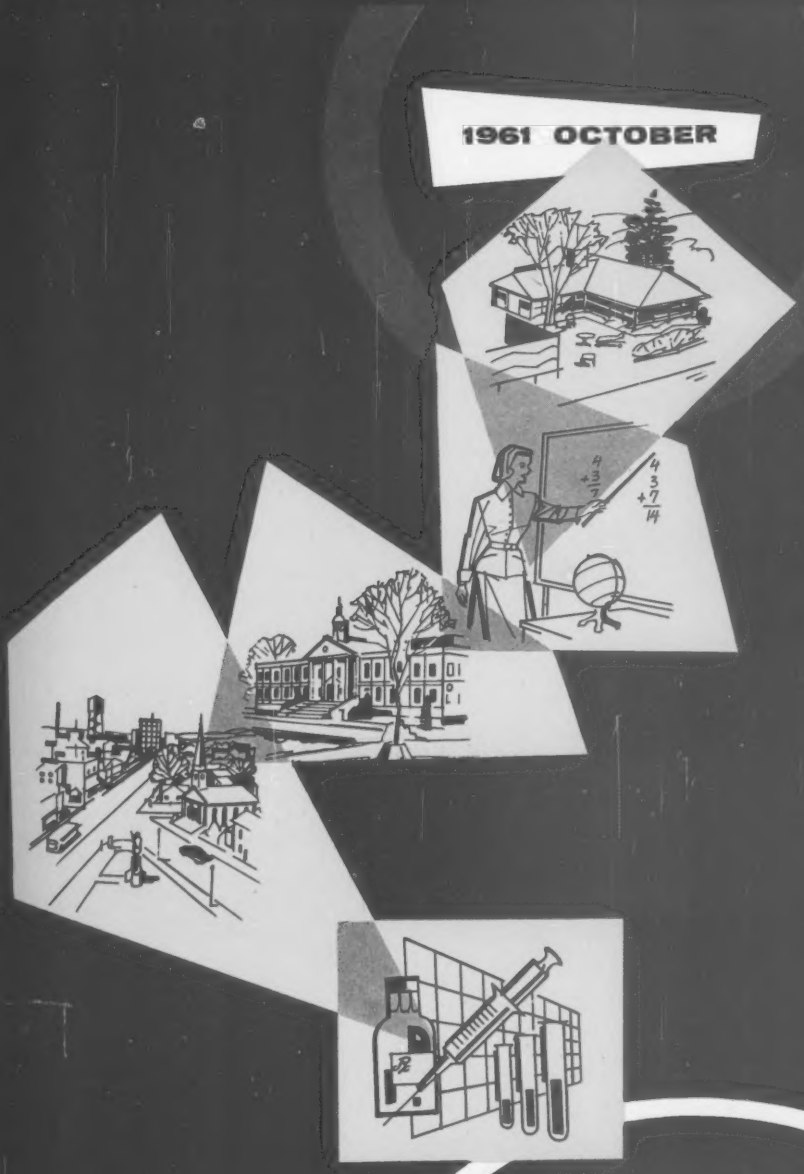

Exceptional Children

CEC DATES

Oct. 1961	Delaware Branch Annual, Harlan School, Wilmington.
Oct. 1961	Alabama Branch Annual, Montgomery.
Oct. 6-8, 1961	Georgia Federation Annual, Rock Eagle Conference Center, Eatonton.
Oct. 12-14, 1961	Pennsylvania Federation Annual, Bedford Springs Hotel, Bedford.
Oct. 20, 1961	Texas Federation Annual, Houston.
Oct. 20,-21, 1961	Illinois Federation Annual, Sheraton Jefferson Hotel, St. Louis, Mo.
Oct. 26-27, 1961	Colorado Federation Annual, Denver.
Oct. 26-27, 1961	Florida Federation Annual, University of Tampa.
Oct. 26-27, 1961	Oklahoma Branch Annual, Central High School Bldg., Oklahoma City.
Oct. 26-28, 1961	Ontario Federation Annual, Connaught Hotel, Hamilton, Ontario.
Nov. 15-18, 1961	CEC Western Fall Regional, Olympic Western Hotel, Seattle, Washington.
Nov. 16-18, 1961	New York Federation Annual, Hotel New Yorker, New York City.
Nov. 29-Dec. 2, 1961	CEC West Central Fall Regional, Commodore Perry Hotel, Austin, Texas.
Apr. 24-28, 1962	CEC International Convention, Deshler Hilton Hotel* and Neil House, Columbus, Ohio.

*Convention Headquarters

OTHER DATES

Oct. 2-4	National Rehabilitation Association, Whitcomb Hotel, San Francisco.
Oct. 9-15	National Association for Retarded Children, Sheraton-Palace Hotel, San Francisco, California.
Oct. 17-21	National Safety Congress, Chicago, Illinois.
Oct. 27-28	Alexander Graham Bell Association for the Deaf Regional Meeting, Fort Lauderdale, Florida.
Nov. 2-4	American Hearing Society Annual Meeting, La Salle Hotel, Chicago, Illinois.
Nov. 5-8	American Speech and Hearing Association, Chicago, Illinois.
Nov. 17-21	National Society for Crippled Children and Adults, Denver-Hilton Hotel, Denver, Colorado.
Dec. 27-31	Speech Association of America, New York, New York.

President's Page

LEO F. CAIN

The Bulletin section of this issue presents to the membership a report of the financial condition of the Council. Each month during the coming year the Bulletin will present information related to important Council activities. The last issue was concerned with the Annual Convention Report. Subsequent Bulletins will deal with such topics as committee activities, publications, headquarter's office services, divisions, federation and chapter activities. We hope you will take time to read this portion of the Journal carefully in order that you may be fully informed on the program, the progress and the problems of your organization.

Financial Problems are Many

The many problems in financing an organization as large as the Council are often difficult and are directly related to the contributions of the membership through the payment of dues. No organization can survive without adequate financial support if it is to serve its function of professional leadership. The Council has now become one of the larger departments of the National Education Association and along with its growth in size has come a growth in stature giving it recognition as one of the significant organizations in the field of exceptional children.

In gaining this status it has had to assume some heavy responsibilities. Legislation in behalf of exceptional children, both on the national and state levels, is of basic importance to the development of adequate programs. The Council has assumed leadership, on both the national and state levels, in supporting appropriate legislation. It has also undertaken the task of upgrading the professional standards of teachers and other workers in the field. Realizing that effective work can only be done with active cooperation of other professional and lay organizations interested in similar problems, the Council is doing everything it can to strengthen these ties with such organizations and with other departments of the National Education Association, the U. S. Office of Education, and the several other government agencies interested in the handicapped.

Many improvements have been made in the Journal over the past few years, and the Council has sponsored other publications such as those in the research monograph series. It has also worked to encourage leadership at the state and local levels, and for more active participation of local chapters. In considering these many activities, it has looked at its own internal organization, and is at present studying the relationship of its divisional structure realizing that strong divisions within the Council can help substantially in furthering a more comprehensive program.

Greater Progress Needed

While a tremendous amount of progress has been made, a great deal more needs to be done and other activities need to be undertaken. In order to do this, the Council must have the financial resources with which to work. One way of obtaining additional financial support is to increase membership. At the present time, we are not yet reaching one-third of eligible professional educators of exceptional children. Many of those who are not members will join, if they thoroughly understand the

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purpose of our organization. But increased membership alone will not provide all the revenues for an outstanding program, and the possibility is now being explored, of obtaining grants for specific projects and research and for combining our resources with those of other organizations in order that all exceptional children may have more opportunities for better educational programs in every state.

A careful look at our financial status will show that the funds now available are being put to effective use. The Governing Board and the Executive Committee have worked hard to formulate a realistic budget to present to the Delegate Assembly which will benefit the total membership. Your interest and suggestions are of vital importance if the Council is to provide the many services which you, the membership, desire.

We hope that you will consider this financial report at your chapter and state meetings in order that they may be fully discussed at the regional and international meetings. In this way the Council will have the real support of its total membership as it moves forward toward long term goals and objectives.

Reprints Available

A limited quantity of reprints of all articles beginning with the September 1961 issue of EXCEPTIONAL CHILDREN is available from CEC headquarters. Reprints from subsequent issues will also be available until further notice. Cost per reprint will be 35¢, prepaid. Discount rates for quantity orders are as follows:

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Attitudes of Homebound Students Toward Return To Regular Classroom Attendance

HERBERT RUSALEM
SHIRLEY JENKINS

In most urban school systems, there are children who cannot attend the community schools owing to the severity of their physical and/or emotional problems. In many cases, such students receive instruction in their homes which, it is hoped, will be more or less equivalent to that being given to children on the same educational level in the regular classroom. For extended periods of time, these children are separated from typical group experiences. To the extent that such group experiences contribute to emotional growth, these homebound children suffer a degree of social deprivation.

Furthermore, the home instruction experience tends to influence their attitude toward the classroom, the teacher, and the group. Such attitudes have not been adequately explored in previous work with this group, particularly in the area of facing the contingency of return to regular classroom attendance. Since such attitudes may facilitate or deter efforts to re-integrate the child into the group situation, it was decided to explore the feelings of one group of homebound students relative to returning to the regular classroom.

A population of 38 high school homebound students was drawn from a special project conducted jointly by The Federation of the Handicapped, the New York City Board of Education, and the New York State Division of Vocational Rehabilitation. This project received financial support from the U. S. Office of Vocational Rehabilitation. The larger project concerned the effects on homebound high school students of a vocationally oriented group program. The 38 students in this study ranged in age from 16 to 18 years. The sample included boys and girls with both physical and emotional disabilities. The IQ ranged from 58 to 113, with a median of 85. Their average stay on home instruction at the time of the study had been 25 months. At the time of admission to the project, few of these students could have benefited from state vocational rehabilitation agency services owing to the severity of their disabilities.

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• SHIRLEY JENKINS is Study Director, Community Council of Greater New York, Consultant, Westchester Children's Association, and formerly Research Consultant for the Federation of the Handicapped.

Method

A set of five incomplete stories was constructed. Each story presented the student with a situation concerning return to the regular classroom, offering the student an opportunity to project his attitude into the material which he composed. The major themes of the incomplete stories were as follows:

Story 1. A homebound student is given an opportunity to decide whether to return to the regular classroom or remain on home instruction.

Story 2. A homebound student is informed that he has been scheduled to return to the regular class.

Story 3. A student who has just returned from a lengthy period on home instruction is asked by the English teacher of the regular high school class to remain behind for a conference.

Story 4. A student who is scheduled to re-enter regular classroom instruction is interviewed by a regular school guidance counselor relative to the problems to be faced in making the transition.

Story 5. A homebound student who has recently returned to the regular class is joined in the cafeteria by two other students who raise questions about his past educational experiences.

After the story themes had been edited, they were administered to a sample of three students as

a pilot run. It was found that the students were capable of working with the materials and that the stories evoked meaningful responses. Consequently, the instrument was administered to the remaining students in the population. With one exception, the students read the stories and wrote the responses independently in small groups. The one exception concerned a student whose physical disability precluded his writing his own responses. In this instance, the examiner wrote the responses for him. In many cases, the disabilities limited the speed with which students could perform the task. As a result, the completion of the five stories required from one to two hours.

The distribution of disabilities in the group was as follows: cerebral palsy, seven; severe emotional problems, six; polio, five; epilepsy, five; other orthopedic problems, four; muscular dystrophy, three; and others, eight. For many of the students, the story completion task presented difficulties other than the mechanical ones, imposed by the limitations of the disability. There was evidence of a strong emotional response to the situation. As one youngster expressed it: "This is tough—real tough —because it's like us. We have to worry about these same things."

The investigator, who had not interviewed the students, reviewed the story completions prepared by them. A set of categories was established for each story and a rating scale was developed for each category. These scales were reviewed, edited, applied experimentally to several sets of the data and modified to provide increased clarity and to facilitate the rating process.

Three judges who had no previous experience with the demonstration and research project nor with this study were used to rate the stories on the selected variables. All the judges were professionally trained individuals with experience in special education—a school psychologist, a social worker, and a special teacher. The three judges worked independently, following an initial orientation to the story materials. The ratings were compared for reliability and chi squares were computed. Twelve of the thirty variables were found to be unreliable and the data relating to them were discarded. The unreliable items were ones which were ambiguous to one or more of the raters. For example, in completing various stories, some students had the non-disabled protagonists ignore the reference to the disability. The judges did not agree as to whether this indicated acceptance, rejection, or neutral feelings about the disability. The findings concern only the 18 items for which inter-judge reliability was established.

Results

Story 1: The student chooses.

The judges agreed that 27 (71%) of the group wrote stories favorable to a student's return to the regular classroom. Three cases were doubtful; four could not be rated; four were unfavorable to regular classroom instruction. The students responding favorably to classroom instruction offered such reasons as being with other students, meeting boys and girls their own age, cultivating friendships, achieving a normal social life, and forgetting about their own disability in a group situation. Twenty-five (93%) of the 27 favoring classroom instruction gave social reasons for their preferences. Only two students selected regular classroom instruction because they felt it would provide them with a superior education.

The most severely physically handicapped students in the group preferred classroom instruction. Despite the difficulties of functioning in a school environment with their severe limitations, they perceived important values to be gained in leaving home instruction. On the other hand, students with severe emotional problems tended to prefer home instruction. Parental figures appeared in only two stories and in both these instances, the parent expressed a preference for home instruction. In seven out of nine stories which mentioned a school principal, the principal favored classroom instruction.

Story 2: The school mandates classroom instruction.

Twenty-five of 38 respondents (66%) expressed favorable attitudes toward return to the regular classroom in their story completions. Although about one-third of the stories revealed anxieties about return to the class, most of the responses suggested "relaxed" student attitudes toward the decision. Since Story 2 had a home teacher as one of the protagonists, it was possible to observe student perceptions of their home teachers' attitudes toward return to the classroom. Only two teachers were preceived as suggesting the possibility of the student remaining on home instruction. Most ap-

peared to foster student independence.

A number of the completed stories indicated that the student in the story was having conflicts about leaving home instruction. The major focus of this conflict seemed to be the necessity of parting from the home instruction teacher. In almost all cases, the conflict was resolved in favor of returning to the regular classroom and severing the tie with the home teacher. Most of the respondents who favored a return to the regular classroom did not perceive the severity of the disability as a major barrier to attendance. The uncertainties that were expressed were in the area of social relationships.

Story 3: The regular classroom teacher asks to see the physically disabled student after his first week in school.

The judges agreed that in half the stories the students predicted good classroom adjustment for the returning pupil. One third of them predicted poor adjustment. The remainder could not be rated. The judges also agreed that over half the responses indicated some anxiety about the student's classroom adjustment. Concurrently, they overwhelmingly perceived the classroom teacher as supportive in the situation.

Many respondents revealed the classroom teacher as indicating concern for the disabled student and perceiving him as "nervous," "worried," "puzzled," "under a strain," and "bothered." These teacher verbalizations in the stories tended to be followed by teacher reassurance that the tensions would be resolved. In some cases, the classroom teacher was revealed as informing the newly-returned student that his work was highly satisfactory.

Story 4: The guidance counselor asks the returning student about his concerns.

The judges agreed that there was a general preference for classroom instruction. However, the students revealed concern about adjustment problems associated with re-entrance into the regular school situation. These concerns were reflected in anxiety about social relationships rather than learning, per se. For example, students included in their stories such remarks as: "Will they like me?" "Will I get scared again?" "It's easy to say don't be frightened, but it's harder to do." Throughout these completed story materials, evidence was found of good communication between the returning student and the guidance counselor.

Story 5: Conversation in the school cafeteria between the returning student and other students.

The judges had difficulty in establishing a minimum level of inter-judge reliability on most of the variables relating to this story. As a result, the materials do not lend themselves to further analysis. However, there was general agreement among the judges that the non-disabled students tended to be perceived as friendly and helpful to the returning pupil.

Discussion

An analysis of the themes of story completions prepared by 38 physically and emotionally homebound students reveals a favorable attitude by these students (especially the physically handicapped ones) for a return to the regular classroom. Apparently, these students are not concerned about whether the regular classroom offers superior educational opportunities. As a group, they do not express doubts about the educational service they are receiving on home instruction. On the other hand, they do express a real concern about the social limitations of a home instruction program. Having the same social needs as other teenagers, they perceive themselves as being deprived of essential social activities by their participation in a home instruction program.

The data tend to support the belief that the relationships of these students with their home teachers are essentially healthy. Apparently, they are more dependent upon home teachers than regular school students are upon classroom teachers. This dependence is manifested by their reluctance to leave their home teachers, occasionally offering this as an argument against returning to the regular classroom. However, their social needs are so strong that the students in this study are prepared to part with their home teachers in order to achieve social goals in a group situation. Significantly, they perceive the home teacher as fostering their social independence and favoring a return to the regular classroom.

Summary

As perceived by homebound students, the major limiting factor in a home teaching program is the inability of such a program to provide them with adequate opportunities for peer group relationships.

In developing home instruction programs, boards of education may need to consider carefully the impact of home instruction on social development and to devise techniques for offsetting the social isolation which home instruction students tend to feel. The New York City Board of Education has made progress in this direction through its cooperative program with the Federation of the Handicapped, a program which supplements home instruction with group experiences and through a broad program of other socializing experiences.

With the exception of some students with severe emotional problems, this homebound group noted relatively few advantages in home instruction. Time and again, they expressed the feeling that the physical disability should not be a barrier to attendance at a regular high school. If it can be confirmed that the physical disability restricts most of these students to high school homebound instruction, it may be important to interpret this fact more clearly for them. Perhaps, some of these students are unrealistic about the physical demands of regular high school attendance and their own capacities to meet such physical demands. If so, they may be helped by visits to high schools and by guidance in evaluating themselves in relation to the physical requirements of regular school attendance.

This study is a pilot excursion into the feelings of homebound students and their perceptions of the regular school situation. It is suggested that, in planning programs for homebound pupils returning to the classroom setting, educators should make provisions for assisting them with the major concern expressed by this sample of homebound children—social acceptance and integration.

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Evaluating Psychological Problems of School Children

MARY ALICE WHITE

RECENTLY I was trout fishing on the Battenkill River in Vermont. When friends of mine came to visit I noticed how differently they looked at the same scenery that I had been studying. They thought the Battenkill a lovely stream, but they didn't comment on its gravel bottom which trout love. They thought the overhanging willows and birch were picturesque, while to me they meant ideal cover for brown trout. They found the water a little chilly for swimming, but they didn't seem to realize that those cool temperatures meant the trout would still be there. The waterfall, scenic to them, meant oxygenated water to me. The difference between what they saw, and what I saw, made an old saying come back to me: "we find what we seek."

As psychologists, I am afraid we often find what we seek. Those of us who are clinically trained or oriented, and who study the problems of school children, so often find evidence in these children to fit our particular clinical point of view. I would like to suggest that we make our evaluations a little more objective, a little closer to the evidence that does exist. In leaping to conclusions about intrafamilial dynamics, we can be leaping to a misdiagnosis.

I will start with a postulate. My postulate is that a child (or any person) should be considered innocent of psychological problems until proven guilty. I would define a psychological problem to mean that a person's difficulties with life stem primarily from his own personality structure, acting and reacting upon his environment so as to cause internal discontent or loss productivity. Excluded from this definition, by implication, are reactions to an unusual stress, those which stem from physiological causes, those bred by cultural conflict, and those which are a common part of human development or decline. Of course, psychological problems will appear in many of these circumstances, reactive to the basic cause. Psychological problems then, by the definition I propose, must come primarily from the individual himself, due to whatever misconceptions or twists of personality that lie within him. To correct such problems would require change within the individual. Changing his environment, his physiology, his stage in the developmental cycle, or his culture, would not solve this problem.

With this definition, I think the burden of proof lies upon us, as psychologists, when we say a pupil has psychological problems. There are several questions to be answered before we can feel that a proper diagnosis has been reached.

Necessary Questions

What is the evidence to indicate that any problem exists?

Most of us are familiar with the misdiagnoses made at this point. You have encountered a teacher whose chemistry reacted badly to a particular pupil, even as ours does, but the pupil did not have a psychological problem. Because a teacher or a parent refers a child is not proof enough. The problem may lie in their own perception of the child, and not in the child.

We must ask, what behavioral evidence exists? What do others say of this youngster? How often has the so-called problem occured? How long has it been going on? How acute is it? Is it periodic or chronic? What has been tried? Who else acknowledges the problem? What do the pupil's peers think? What does the child think?

There is no substitute for a thorough history. It

• MARY ALICE WHITE is Psychological Consultant for the Pelham School System, Pelham, New York.

is here that the evidence is sifted and many so-called problems turn out to be passing situations or misconceptions.

What is the child's learning ability?

You may think me old-fashioned because I put such early emphasis on what we call intelligence. Thirty years ago, IQ's were the rage among psychologists. Now they are the rage among parents and admission officers, while some psychologists seem to find them old hat. We all know what's wrong with IQ's and how we measure them. But perhaps we forget what's right about them.

If we are evaluating a pupil, we must remember that school is primarly a learning situation. How well that child learns and performs makes a great deal of difference to his parents, to his peers, and let me stress, to himself. A child's ability to learn in a school situation, whether we like it or not, determines to a large extent his place in school society. And intelligence, regardless of whether we like it and the manner in which it is measured, seems to have a great deal to do with that school performance. We all should remember that IQ is positively correlated with the amount of education completed; that it is one of the best single predictors for educational success; and that IQ, socio-economic status, and peer popularity in school have some rather high intercorrelations. Therefore, if a pupil has been referred to a school psychologist, one obvious question to be answered is what is this child's learning ability? Has it been adequately measured? What could be influencing his scores? What can we expect scholastically from this child?

Let me add a word of caution about how we psycholigists interpret IQ's. So many times we hear ourselves say that this child has no real learning difficulty because his IQ is 110. But how many of us have made a distribution of the actual IQ's in our school system to see where this places our pupil? You may be surprised to find, particularly if you are in a privileged school community, that 110 IQ is only the 44th percentile. It isn't bad, but the 44th percentile isn't good either, especially for a high school boy whose parents want him to go to college. This boy does have a learning difficulty in the sense that he is a little below the average for his local competition and he is going to have to work hard to be in the golden upper half. Of course, this type of error is more easily recognized when the parents make it! We all know of parents who overexpect for their child, which is a very human fault. We have all tried to break the news gently that their child has limited abilities. But how many times have we made the same mistake ourselves by failing to compare a pupil accurately with his own local competition?

What is the pupil's socio-economic status?

The evidence on the positive relationship between socio-economic status (or SES) and academic achievement cannot be ignored, although there is a fatalistic and underocratic aroma to the subject. Toby (1957) has reported: "Even by grade placement, for every age level, the average grade of middle-class urban children is higher that that of lower-class children." These differences, he says, are as true at seven and eight years as they are at high school. That should make us think of some larger force than individual psychological problems. Davie (1953) found a significantly high correlation between SES and school attendance. Havighurst (1944, 1945) participated in a series of group investigations, all with the same result: children from high SES homes did better on a wide battery of tests, and achieved more education, than did children from lower SES homes. Tested ability by occupational class shows the same correlation, namely the higher the occupational class, the higher the tested ability.

I am sure you know the mass of evidence in this area, all of it sobering. It seems to indicate that SES and tests of school achievement are positively related; that SES and intelligence test scores are positively related; that SES and the pursuit of education is positively related. Why this is so is not something to argue at this moment. But it does create problems in the school culture. Davis (1950) has been vigorous in calling attention to the conflicts between educational values and the values of lower-class children. Many of our lower class pupils have a good hand IQ but a low head IQ, and they don't fare well in school. Davis (1950, p. 30) has charged: "The conception that aggression and hostility are neurotic or maladaptive symptoms of a chronically frustrated adolescent is an ethnocentric view of middle-class psychiatrists. In lower-class families, physical aggression is as much a normal, socially approved and socially inculcated type of behavior as it is in frontier communities." How many aggressive problems were referred to us this past

year in which we ignored a possible SES factor?

The evidence so far suggests that lower SES pupils enter our school culture with the odds against them. An unfortunate chain of events may start when this pupil has his first learning experience. Perhaps in kindergarten he is a child who does not follow instructions readily, take initiative, or share group responsibility. In the first grade he may not learn to read as quickly as others, is restless in the classroom, distracting, and the beginning of a discipline problem to his teacher. Because of his poor academic achievement, and probably a relatively low intelligence test score, he may be considered a slow learner who needs to be retained in one of the elementary grades. Thus may begin a chain of educational failures which will close, as far as the school is concerned, at or about the age of 16 when this same pupil will leave school, two grades behind his age, without a high school diploma. He will leave behind him a series of frustrated teachers, guidance counselors, principals, and the school psychologist, who have tried to cope with a pupil who did not like school, did not succeed in it, and who did not respond to discipline, encouragement, counseling, psychological therapy, or, as a matter of fact, to any attempts of school culture either to change his attitudes or to educate him to the level of which he was capable. We need new educational methods for such pupils. The school psychologist at least must grasp the social forces at work and realize that there is more to a pupil's life and future welfare than his ability to succeed by school standards. The courageous school psychologist may even help such a pupil succeed within his own social class mores, rather than within those of school society.

What is the pupil's cultural background?

Does he come from a cultural group which has strong feelings, pro or con, about education and the authority of the school? In what way will his cultural background affect his reactions to school? How will he stand with his peers? Will he experience prejudice, either for or against himself, because of his cultural background? What will be the effect of his socio-economic and cultural background?

All of us have seen these children who run head on into difficulty at school, not only with the learning process, but with school authority and with their peer society. All of us have known the boys like Jerry, from a lower SES background, and from the cultural group in town held in least respect. It would be hard to say which factors pushed Jerry into a chronic pattern of rebellion at school, his defiance of those nice middle-class lady teachers, or his show of bravado in fighting all school authority. Jerry had only one role with his peers, that of a strong man, and it was a role he played to the hilt. By fourth grade, he had left no other role for himself. His parents did not believe in school or its culture. Jerry saw no chance for himself to succeed socially at school, so his understandable reaction was to put up a good fight, and a good fight it was, lasting from kindergarten to the ninth grade when he left school.

Yes, he was seen by psychologists, and social workers, and psychiatrists, and so were his parents and older sister. And he was seen by principals and guidance counselors, and teachers who tried to befriend him, and coaches who tried to interest him in sports. But I have no pleasant ending to report to you. Jerry failed in school culture and I think we failed him, but I am not prepared to conclude that his basic problem was psychological, as I have defined it. It seems to me that his basic problem stemmed from social forces characteristic of many more pupils than just Jerry and his personal reactions were secondary to those factors. I may add

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that the social forces were sufficiently strong to make any type of psychological or therapeutic help unsuccessful, which might be a diagnostic sign in itself that the primary problem is not psychological in nature.

What is this pupil's social role with his peers?

This question needs to be asked, and answered, before we can decide that a psychological problem exists. Of all the questions overlooked, this seems to be the most frequent. It isn't that the question isn't asked, or that teachers and counselors don't try to give their picture of the student's social status. It is more that they often don't know, or know enough. The fourteen year old boy who is a discipline problem to the adults in school may have a very important reputation with his peers, far more than his neighbor who offers no problems. By important reputation I also mean a good reputation, with both the top and the fringe cliques in student society. He, in short, may be one of the "good guys," even though he is flunking two courses and often in the principal's office. To understand another youngster's poor marks and rebellious attitude, we may have to understand how he is struggling to make it into a clique where such behavior will gain more status than by being a "nothing." There is a certain courage, after all, in defying adult authority, even if it doesn't win friends among the faculty or win favor at home. At the high school age, as we all know, the student wants to win favor with other students and not with us, as Gordon (1957 has so ably described.

The importance of a pupil's sociometric status is becoming more and more evident. One of the most interesting studies has been contributed by Buswell (1953) showing the relationship between sociometric status and scholastic achievement. She found that kindergarten pupils showed no correlation between social acceptability and achievement test scores, but when she repeated the study on the same pupils six months later in the first grade, the social structure had changed. By the fall of the first grade, when the emphasis on achievement begins, the high social acceptability group showed higher achievement score than did the low social acceptability group. She repeated her experiment on fifth grade pupils and then again when they had become sixth graders. The high social acceptance group received higher achievement scores both times. When IQ was controlled, however, there were no differences between groups.

Now, what does this type of evidence suggest? It suggests a disturbing circular relationship among IQ school success, sociometric status—and if we look behind the IQ we know it is related to SES. It seems to say that "Them that has, gits." Then we come to the evidence contributed by Gronlund and Holmlund (1958) who began with a sociometric study on sixth grade pupils. Seven years later, when these same pupils were in high school, the authors found a positive relationship between sixth grade high sociometric status and (1) continuing in high school until graduation, (2) academic rank, (3) participation in extracurricular activities, (4) participation in varsity sports, (5) leadership positions in school affairs, and (6) IQ. In short, high sixth grade sociometric status was a rather good predictor of high school success. Finally, Bedoian (1953) adds a link to mental health in an interesting way. Among sixth grade children he found the more popular children had higher mental health scores than did the unpopular ones.

What is the status of this pupil's physical health?

I hope I don't need to stress the grave importance of ruling out physiological dysfunctioning before leaping to psychological conclusions. As a group, I think psychologists are becoming much more alert and diagnostically precise in picking up organic factors, particularly in the area of brain damage or cerebral dysfunctioning. But let us not stop there. A child who is physically ill, as all parents know, is just not himself, and he doesn't have to have brain damage to show it. I think of Tommy, a thin nervous white-faced little third grader whose pediatrician referred him to the school psychologist for psychological problems. Yes, there were problems at home, plenty of them, and it would have been the easiest thing in the world to leap to a psychological conclusion. But a thorough history suggested little relation between his nervous symptoms and strife at home. His pulse and blood pressure were abnormally high, but they did not vary with pressures at school. Further medical studies were undertaken before the physician discovered that Tommy was severely hyperthyroid. With proper medical treatment, Tommy's symptoms subsided. The problems at home remained.

There is increasing evidence on the relationship between physical disabilities and behavioral symp-

toms. Eisenberg (1960), after reviewing the studies in this area, feels that abnormalities in pregnancy and delivery have occurred in significantly higher proportions in those children with behavior disorders and reading disabilities than in matched control groups. Recent EEG work suggests children with behavior disorders display a higher than expected frequency of abnormal brain waves. A number of studies indicates a higher incidence of physical disabilties among children of lower IQ, and lower IQ seems associated with lower SES. Strauss and Lehtinen (1955) and the more recent studies by Pollack (1957a,, 1957b, 1958, and 1960), Krupp and Schwartzenberg (1960), Taylor (1959) and Haeussermann (1958) suggest improved diagnostic techniques which can be applied in schools.

Is this pupil going through a normal developmental phase?

One of our bibles seems to be that small report by Macfarlane, Allen & Honzik (1954) which gives us some idea of the pattern of behavior problems of children up to 14 years of age. Why should we leap to psychological conclusions about a 10 year old girl who is displaying a symptom common to her age that usually disappears by the age of 14? Or take the matter of speech difficulties. They seem to be common to boys, starting between the ages of three to five. How do we decide one speech difficulty is just a developmental phase and another is not? How do we decide who needs therapy and who should have treatment judiciously postponed? Which adolescent rebellion is normal, and therefore healthy, and which suggests an internal problem of a potentially pathological nature? The pupil who hangs onto the adults around school, but fails to make it with her peers, may be going through what all mothers call a phase, but is a deeper illness showing itself? This is where our judgment, our diagnostic skills, and our knowledge of the published evidence, are so badly needed.

Is this pupil reacting to some unrecognized situation within the school environment?

Is he new to the school and struggling to establish himself with his peers? Is he lost in his subjects because of a difference in curriculum, or some academic area he has missed? Does he feel out of place? In this little first grader upset because she's afraid of a dog on the way to school? This fourth grade boy, who is reported so defiant and troublesome in the classroom, is said by the gym teacher to be a fine sport and a leader. It turns out that this same boy was blamed by his teacher for an incident earlier in the year, one which he did not do, and his sense of fair play was outraged. His defiant attitude turns out to be a localized reaction within the school. In another classroom, we uncover one of those unusual class groupings, one that from the point of view of social psychology is unhealthy. The dominant clique is run by two surreptitious bullies, who have turned the class against the different boys. What we have, unknown to adult eyes, is a secret police state. Reorganizing the class produces some amazing changes in children who were thought to have deeper psychological problems.

Is the student reacting to some unrecognized situation at home?

If he is not reacting to some unrecognized situation at school this becomes a necessary question. We all have been struck so many times by the things that trouble children, which adults never even imagine. Our perspective is so different. Most of us have outgrown the witchcraft and mythology of

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childhood which can have a terrible grip on a child. I am thinking now of an entrancing eight year old girl, Anna, who was reported listless and irritable at home and in school, Anna had epilepsy and knew she did. She had to take medicine which was bitter. She hated to take it, but was scared not to take it. Behind her fear was a deeper one. Her beloved pet dog had died of a chronic disease, one which had ended in a fatal convulsion. Anna had nursed him tenderly and had been heart-broken. What no adult realized was that Anna thought she had the same disease as her dog and that she, too, was going to die. This was not helped by her older sister's teasing, for her older sister, like so many children, would tease in her most sensitive spot—namely, that her other pets were going to die the way her dog had. What the older sister did not realize was Anna's belife that she, too, was going to die. Cruel? No, not cruel, just children and children's perceptions of life. Anna was explained more of the exact nature of her own illness, and a better tasting medicine was used along with generous dashes of orange soda, and Anna was a very relieved little girl. She had a problem, maybe even a psychological one in that it stemmed from her own misperceptions, but one that was not unnatural and thus easily corrected with adequate information.

Is this student just a different child?

So many interesting adults, and so many creative ones, were not good at school, outstanding members of their social groups, active in extra-curricular activities, or good at sports. Some of these same adults were very introspective children, 'odd balls', poor at school work and teased mercilessly. Out of these differences have come wells of creative ability and unique perceptions which have enriched all of our lives. Sometimes one difference between these children and those with psychological problems is the degree of inner happiness. This is not always true, but sometimes the different child is not so pained by his difference, as he is by all the efforts to make him un-different, and by the disappointments to his parents when their efforts fail.

Walter, now 16, is such a boy. He was born to be an architect. His life is the design of buildings and interiors. For reasons which are not clear to me even now, he and his mother have never hit it off, but his father has tried to take his part in an ineffectual way. Life at home has been a vicious triangle for years, and that is a psychological problem. Yet much of it stems from the fact that Walter is different. He is a poor student at everything except art. He is only a fair athlete. He is not the All-American boy his father really wanted and his aesthetic interests arouse his mother's antagonism. Both parents have sent him to schools to reform him into a regular guy. They will not accept an unusual educational pattern for him. They find his dreaminess and lack of practicality a constant irritation. And Walter? Well, Walter lives for the day when he can be what he wants to be and respected for it. In the meantime his life is very miserable. But the distinction I am trying to make is that I believe Walter would be a changed boy if he had lived in a different environment. Even today, he is a happy and engaging lad when he is in the company of adults who appreciate his qualities. With his peers? Well, you can guess. At boarding school or at public high school, Walter's type of boy usually has a hard time. Because of his lack of practicality, his naivete, he is often the butt of jokes and horse-play. Walter won't come into his own until he is an adult, and we will just to have to pray that proper treatment may keep him from being too badly scarred.

Psychological Problems?

I share the concern that I'm sure most of you have, that many children who are different, and wholesomely different, are being diagnosed as psychological problems. Where do we draw the line? When is a difference interesting and refreshing; when is it pathological? When does a lack of social acceptance indicate an absorption with some future interest; when does it mean an unhealthy pattern?

I do not want to leave the impression that I don't think psychological problems exist. Of course they do, from little ones to big ones. Once a major illness is present, it isn't very hard to recognize it or diagnose it. As a matter of fact, I have always been amazed by the very limited number of ways in which people show mental illness. But it is a far different matter to separate the incipient schizophrenic 14 year old from the healthy 14 year old going through a developmental phase. Not all aggression is sick, not all withdrawal is sick, not all introspection is sick, not all underachievement is sick.

But before we use our professional skills to reach a diagnostic decision, I am suggesting we owe it to ourselves, to our pupils, to their families, to our teachers, and to our profession, to be very conscientious about our opinion. It should mean a great deal, if we keep high standards and avoid throwing labels around sloppily. I am suggesting these 10 questions, and there are probably more, which we might ask ourselves before we say a pupil has a psychological problem. We can ask ourselves:

- What is the evidence to indicate that any problem exists?
- What is the pupil's learning ability?
- What is the pupil's socio-economic background?
- What is the pupil's cultural background?
- What is the pupil's social role with his peers?
- What is the status of this pupil's physical health?
- Is this pupil going through a developmental phase?
- Is this pupil reacting to some unrecognized situation in the school environment?
- Is this pupil reacting to some unrecognized situation in his home environment?
- Is this pupil just a different child?

If we can answer these 10 questions satisfactorily, then we may be entitled to push our search into the psychological realm. As we search for psychological causes, I hope we can do so in the spirit of the British Committee on Maladjusted Children (1955) whose report begins: "Maladjustment is not the same as unconventionality or oddness of behavior or belief, which may not do a person or his fellows any harm. As Sterne pointed out in 'Tristram Shandy;' have not the wisest men in all ages . . . had their hobby-horses; . . . and so long as a man rides his hobby-horse peaceably and quietly along the King's highway, and neither compels you or me to get up behind him,—pray, Sir, what have either you or I to do with it? A man's idiosyncracies may even be a sign of self-confidence and strength, and lend attractiveness to his character."

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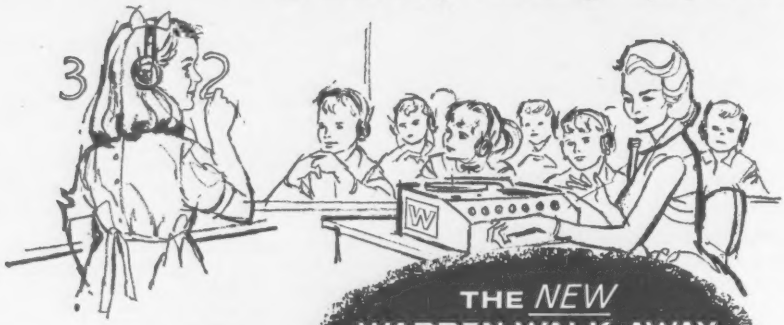

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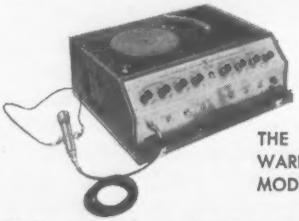

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A Proposed Conceptual Framework for Special Education

SAMUEL LEVINE

There has been a paucity of investigations in regard to the personal and social development of the exceptional child[1], in spite of the growing body of knowledge and increased research activities on non-disabled children. In part this is because special education, to a great degree, has remained at a highly pragmatic level; the major concerns relating to program organization, curriculum development and therapeutic devices and procedures. The need for systematic theoretically oriented research in special education has been stressed recently by Block (1955), Kvaraceus (1958), and Meyerson (1955). This paper proposes a theoretical framework relating to physical and mental disability from which hypothetical propositions are deduced, offering some direction for future research.

The writer is aware that the basis of the differentiations for exceptional children may be a physical, emotional or intellectual deviation or any combination of these. The fact that the group is heterogeneous in regard to disability does not deny the usefulness of the proposed framework. One might modify, amplify or make more specific any particular hypothesis based on one of the exceptionalities. However, as an orienting frame of reference the theoretical propositions and their hypothetical derivations appear heuristic.

This paper will not be concerned with the resolution of the practical implications of the proposed framework. However, it would be profitable to stipulate some of the more salient theoretical questions and their practical counterparts in regard to physical and/or mental deviation. The pervasive concern among special educators has not been with the "a" set of questions, but, rather, with the "b" set of questions. A list of these concerns follows:

1. (a) What is the effect of physical and/or mental deviations on group cohesion?

   (b) How can families who have such children be helped in order to reduce intra-family conflict and increase family integration?

2. (a) What are the effects of a physical and/or mental handicap on personality development?

   (b) What kind of educational and vocational planning is necessary for these children in order to reduce maladjustment?

3. (a) What is the relationship between the learning of stereotypes toward deviants and concept formation?

   (b) How can we reduce stereotyping toward individuals with physical and/or mental handicaps so as to reduce certain restrictive barriers to their adjustment and to improve their social acceptance?

4. (a) How does physical and/or mental deviation affect the socialization of the child, particularly in relation to parent-child interaction?

   (b) How can we reduce parental overprotection of the handicapped child and increase the child's self-direction and psychological independence?

5. (a) In what way does a physical and/or

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[1] Exceptional child refers to all categories of children with mental and physical deviations other than the "gifted." Much of what is proposed here is not applicable to that group and it would appear preferable to exclude them from the present discussion. For the purposes of the article, the exceptional child is defined after Barker, *et al* (1952) as a person having a physical and/or mental handicap and who is generally perceived in his cultural group as deviating sufficiently in these respects to prevent him from participating in important activities on terms of equality with normal individuals of his own age.

mental handicap affect one's status, position or role expectations in society?

(b) How can we reduce the marginality or isolation of individuals with such deviations so as to maximize their contribution to self and society?

Conceptual Framework

Social psychological research regarding the exceptional child has been oriented primarily toward the phenomenon of acceptance-rejection. The major sources of such information have been sociometric and attitude studies. The effect of rejection on personality development has been inferred from these studies, the basis for the rejection being posited in the disability. They have generally sought to confirm or deny the existence of rejection without specifying the conditions under which rejection (or acceptance) may be increased, lessened or modified. In effect, the obtained relationships between disability and acceptance-rejection have been interpreted solely in terms of the deviation as the basis for the findings.

The single variate approach in studies of disability is due, the writer believes, to the assumption that physical and/or mental deviations are sufficient conditions for explaining the observed or measured relationships. The lack of theoretical propositions has minimized other sources of variation as explanatory variables. Berreman (1954, p. 347) states that the problem is to determine how much the psychological and social maladjustment of the disabled child is "an inescapable consequence of physical or other impairment, and how much results from social factors—from the status accorded such individuals in our culture and the position accorded to them by 'normal' people."

The implication of the above is that the concern regarding physical and mental variation must extend beyond solely some objective assessment of the individual's disability. Meyerson (1955, p. 9) points out that the effect of such variations "is strictly relative to the expectations of the culture in which the person lives, the tasks that are required of him and the meaning the person himself and others may assign to the variation." "Disability," Meyerson (1955, p. 12) contends, "is not an objective *thing in a person*, but a social value judgment."

These values relate to society's perception of leadership, contributions toward improving society, being a good citizen, being a family head and other essential aspects for maintaining society. These values are criteria against which behavior is assessed in terms of deviation. All members of society, whether handicapped or not, are evaluated primarily by these values. Where an individual cannot meet these demands, or where there are questions as to the adequacy of the individual in relation to these demands, there will be some devaluation of him on society's part (Barker, *et al*, 1953; Garrett, 1953; MacGregor, 1951; Meyerson, 1948 and 1955; Mussen and Barker, 1944; and Wright, 1960).

Disabled individuals are treated as members of a category which communicates to society some statement of the individual's present and/or potential contribution. These categories, e. g., blind, deaf, mentally retarded, cerebral palsied, orthopedic, or the more general inclusive category, disabled or exceptional, contain the stereotypes, biases and sets toward individuals who are members of these groups. Vinacke (1957, p. 239) suggests that the distinctive element in stereotyping is the social significance of the behavior: "The fact is that traits represented in stereotypes depend solely upon properties which a group of people agree are typical of a class just as is the case in practice for classes of other objects. In this sense the properties of stereotypes have a social reality regardless of whether objective measurement would support them or not. Indeed, it is very likely that such measurement would support, at least to some degree, some traits but would not in the least substantiate others."

Categorical Terms

Society "understands" or conceptualizes the disabled individual in categorical terms. Those attributes which society utilizes for categorizing the disabled we term the defining attributes of the category[2]. Each behavior in the category has a degree of defining value in respect to its predictability to the stereotype. Those behaviors that afford maximal prediction to the category have a high defining value and are crucial to the stability of the category. Although these categories may be modified in relation to a particular individual, to a great degree they represent categorization based on biological resemblances. In a sense, these exceptionalities have a common or shared stimulus function.

[2] The terms "defining attribute" and "criterial attribute" are borrowed from Bruner, Goodnow and Austin (1956).

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This leads to certain social distinctions and culturally imposed differentiations (Anastasi, 1958; Barker, *et al*, 1953; Heider, 1941).

The disabled individual may not share society's frame of reference in regard to his disability. He will develop for himself a way of understanding and of differentiating those aspects of his disability that present difficulties for him and those that he feels are of no consequences to his general functioning. Those aspects of his behavior he defines as most differentiating relative to his deviation we call the criterial attributes of his disability. The criterial attributes are specific to the particular individual's assessment of his abilities, interest and aspirations. Vinacke (1957) makes the point that, in his studies, there is a marked general similarity in the content of self-stereotyping as compared to those stereotypes held by others. Dembo, Ladieu and Wright (1948) found that disabled individuals tend to place themselves in positions on a fortune-misfortune scale similar to non-disabled individuals; whereas non-disabled placed the disabled low on this scale. These findings suggest that a study of the perception of disabled individuals' criterial attributes (self-attributes) as compared to the defining attributes may be fruitful.

The disabled individual will at times come into conflict with the existing structure, whether it be in regard to educational, vocational or social aspirations. Conflict will be evidenced by overt rejection of the individual's aspirations, denial of his competence, and/or a refusal to extend consideration to him equal to that of a non-disabled individual. It is hypothesized that the greater the difference between the individual's criterial attributes and society's defining attributes, the greater will be the conflict. The obvious question arises as to whether conflict is a necessary condition in such situations.

It should be remembered that the defining attributes of a category represent attitudinal or behavioral stereotypes toward particular groups or individuals (i.e., blind, deaf, etc.). Insofar as these stereotypes have restrictive or devaluating effects on the individual, the basis for conflict is always present. It could be asked if conflict might be reduced, or perhaps eliminated, by having the disabled accept all of, or most of, society's defining attributes in respect to his disability. Meyerson (1955, p. 56)

says, in this respect: "It is easy to contend that the disabled person must 'accept' his disability, but this is only a meaningless and contradictory platitude if the underlying situation of disability is not understood. If 'acceptance' means that the person must be content with an inferior position that requires him to acknowledge his inferiority as a person and permits him to strive only for intrinsically less satisfying goals, 'acceptance' is difficult. If there is no assurance that society will 'accept' the disability also and not penalize the person for it, it is unrealistic to endow 'acceptance' with the qualities of a panacea."

Depending upon the frequency with which conflict occurs and the degree of difference between the criterial and defining attributes, there will be a greater or lesser sense of isolation or non-belonging. To the degree that the individual feels this sense of isolation or non-belonging, there will be psychological and social distance[3] between society and the disabled person (Barker, *et al*, 1953; Meyerson, 1948 and 1955; Tenny, 1953).

The individual who seeks participation and acceptance in areas where the stereotypes are firmly established will come into conflict situations. The more crucial the stereotypes are for the definition of that category the greater will be the resistance to the disabled individual's participation. Bruner (1951, p. 208) has pointed out that expectancies mold perceptual organizations in a self-sustaining fashion. That is, ". . . most people come to depend upon a certain constancy in their environment and, save under special conditions, attempt to ward off variations from this state of affairs."

Psychological and Social Distance

The creation of psychological and social distance is a reciprocal process. The disabled individual may become sensitized to group feelings and non-membership, or if he has had membership, it may have been unrewarding, and he may withdraw from social contact. The individuals in the disabled person's environment may interpret the withdrawing behavior as a confirming instance of the defining attributes. The stereotype is in part confirmed and the group acts in such a way as to reinforce the disabled individual's feelings of difference and isolation. Thus, psychological and social distance is increased. The withdrawal of the disabled person from the environment decreases the communication between him and those around him, lessening the possibility of understanding his interests, aspirations and the ways of his dealing with society's perception of his deviancy. The lessening of communication, of course, will tend to increase the psychological and social distance and more firmly establish the existing stereotypes.

To a great degree this psychological and social distance is anticipatory in nature. As the individual's sense of difference and non-belonging is reinforced, the greater will be the anticipation of non-acceptance in future situations. The effect will be for the individual to avoid general social contact, thus increasing psychological and social distance and leading to a personal sense of inadequacy. The anticipation of psychological and social distance is an anticipation of failure. The individual may rationalize his feeling of inadequacy by, in fact, attributing to himself the existing stereotypes and perhaps seek what might be termed a "deviant adjustment." A relatively extreme form of this is removing oneself from general societal contact and seeking companionship solely within the disabled group.

Murphy (1947, p. 767) points out that the deviant has his own world, his own deviant group, in which membership is experienced. One can only speculate about the effect of such deviant groups (such as associations and clubs for the deaf, blind, etc.) on the individual. It is suggested that the greater the individual's dependency on such organizations, the greater the reinforcement of existing stereotypes and the greater the psychological and social distance. The implications of the above statements for the present system of segregated special training schools and institutions appear obvious. To a great degree the educational channels for exceptional children are comprised primarily of children who

[3] The term social distance has had long and considerable usage in sociology. Von Wiese and Becker (1932, p. 241) regard such distance "as a condition resulting from the inhibition of tendencies toward association by tendencies toward dissociation from personal and/or situational factors." Newland (1957, p. 150) speaks of psychological distance and sees this process as both a general, attitudinal reaction as well as a highly situational phenomenon. He states, "attitudes, tempered in forms of certain value systems, may be regarded as indicative of such distance." The term psychological and social distance is used here in order to convey the sense of the interaction of the pervasive, generalized attitudinal system with the personal situational factors.

are themselves disabled.

Meyerson (1948, p. 4) contends that variations in physique lead to a highly negative value and for more extreme deviations, positive restrictions. It is hypothesized that the more obvious or visible the defect and the greater the apparent relevance of the exceptionality for the performance of a task, the greater will be the psychological and social distance. These predictions are given some credence by the findings of Schachter (1951, p. 201) in a study of non-conformity. His data indicate that people who strongly reject the deviate perceive a greater difference between themselves and the deviate than do people who do not reject them. Force (1956, p. 107) concludes, in discussing his findings, "It would seem that a factor of visibility was also operating in which acceptance is more of a task for the child with a disability which is readily discernible or obvious to the viewer."

Kvaraceus (1956, p. 331) measured the degree of acceptability of deviations in children among professional workers. He concludes, "... apparently this group of professional workers feel most comfortable with the most respectable and perhaps the least offensive of the deviates." Johnson (1950) found that as intellectual ability decreased, acceptance by other children decreased and rejection increased. Lewis (1947, pp. 32-33) found that teachers assign traits that have definite mental health value, as determined by mental hygienists, differentially based on the child's intelligence. The geniuses and high IQ group were assigned the high value traits more frequently than the normative group. Both the retarded and the "problem" groups were assigned these traits less frequently than the normative group.

The hypothesis concerning the obviousness of the defect and the creation of psychological and social distance needs qualification. Wright (1960, pp. 53-54) cautions, "Doubtless there are other factors associated with degree of disability, some favoring and some hindering adjustment, the resultant effect being quite removed from the objective fact of severity." One factor offered here relates to the role of achievement in the modification of the defining attributes and the lessening of psychological and social distance. It is hypothesized that, holding degree of disability constant, there will be an inverse relationship between the child's achievement and the amount of psychological and social distance engendered by the disability. More than likely there will be an interaction between the degree of disability and the child's competence with the amount of psychological and social distance created.

Evidence supporting this proposition is not readily available but some suggested support for our thesis can be found. deGroat and Thompson (1949, p. 74) found that children who show evidence of having acquired more subject matter receive a higher proportion of teacher approval as rated by the pupils. They conclude that "children who experience a high degree of teacher approval have a better opinion of themselves, are more 'outgoing' and have more confidence in their ability to adjust to social situations." As expected, they also found that the more intelligent children receive a significantly greater amount of teacher approval, while the less intelligent pupils experience larger amounts of teacher disapproval. Wright (1960, p. 153) conjectures that attributes such as "perseverence, independence, intelligence, moral stamina, etc. may give genuine support to an ego that may be undermined by the negatively evaluated attributes of the disability itself."

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Criteria for Inferring Psychological and Social Distance

Any proposed scheme from which psychological and social distance is to be inferred must assess the strength of existing stereotypes as well as the effect of non-conforming or non-exemplary behavior on the reduction of these stereotypes. The categories within this scheme indicate the strength of the behavioral stereotypes toward the general category of disability or exceptionality or toward any specific category, such as blind or deaf.

We would have a non-exemplar of a specific category where the group's expectations are not borne out in regard to the individual's abilities. For example, each time the statement is made, "I didn't know blind people could do that," there is a tendency to break down that category. For that individual, at least, there is less predictability to the category, "blindness," and therefore less validity to the defining attributes of that category. This suggests some fluidity in regard to the defining attributes.

The following categorical scheme permits the determination of the defining attributes and the criterial attributes from which the inference of psychological and social distance is made.

Category One: This category contains all of the behavioral stereotypes shared by society, relevant to a particular disability. These stereotypes apply to all individuals having a particular disability. Category One is akin to "biological determinism" in regard to physical disability. That is, the stereotypes are taken as a statement regarding the human nature of the disabled individual.

Category Two: A particular disabled individual performs in such a way on a defining attribute so as to make his behavior indistinguishable from a non-disabled individual. The disabled individual will be seen as a non-exemplar relative to that particular behavior by all persons who come into contact with him. In this case, the disabled person is seen as the non-exemplar rather than the behavior. There are undoubtedly many disabled individuals who, relative to a specific behavior, are non-exemplars. The particular behavior in question may vary from individual to individual. It is possible to predict for these individuals in respect to all other defining attributes.

Category Three: A particular behavioral stereo-

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type through non-exemplary confirmation gradually becomes less important or less differentiating in regard to the defining attributes. This may occur through mechanical or other modifications that permit the disabled individual to now meet certain expectations that were not before possible. When a sufficient number of disabled individuals do not confirm the expectation relative to a particular defining attribute, this behavior becomes non-exemplary for all individuals. In this instance the behavior is the non-exemplar rather than the individual. The behavior now becomes non-defining, as it does not contribute to the scheme of attributes that have predictive value.

Category Four: A particular disabled individual, although evidencing some structural limitation, may not be differentiated from the non-disabled on a functional basis. For this individual, most defining attributes are non-predictive and for all intents and purposes he is a non-exemplar. For example, "It's hard to think of him as a blind person" would be appropriate for such an individual. The defining attributes will, however, be present for other individuals having these same physical limitations. The non-exemplar is, again, the individual, but here he is, in effect, not thought of as disabled; whereas in Category Two the individual is so considered. Category Four is a considerable step or movement toward breaking down the defining attributes. Despite the fact that a few individuals are involved, the inability to predict for these individuals to any or hardly any important defining attributes raises two fundamental questions:

1. What are the conditions in the life situation of these individuals that permitted the development of non-differentiated behavior?
2. Could many, or most, or all such disabled individuals function in this way, given these or similar conditions?

Category Five: Here the defining attribute breakdown has been virtually accomplished. A sufficient number of meaningful behaviors have become non-differentiating for most (or all) members of a particular disability. The defining attributes have no functional utility, except in those areas dealing with specific structural limitations. Functional questions regarding any disabled individual will be determined at the empirical level. However, no prejudgments will be made, as no stereotypes exist.

Summary

The study in special education of variation in physical and mental development has been concerned primarily with the solution of practical problems rather than with theoretically oriented research.

The author proposed a conceptual framework from which hypothetical propositions were deduced relative to the personal and social development of individuals with physical and/or mental deviations. It has been suggested that these disabilities have both objective and value dimensions associated with them.

The generalized attitudinal set by which society conceptualizes such deviations are referred to as defining attributes. The personal, self-evaluative aspects of the individual's disability are termed criterial attributes. A scheme for assessing the strength of these attributes was presented in terms of categories offering the possibility of determining the relationship between cultural biases and stereotypes and the disabled individual's self-perceptions and personal aspirations.

The concept of psychological and social distance was suggested as a criterion measure of social interaction. Various hypotheses have been set forth specifying the conditions under which psychological and social distance will vary.

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Regional Conventions

Seattle—Nov. 15-18 Austin—Nov. 29-Dec. 2

See September issue of
Journal for program outlines.

OFFICAL NOTICE

A SUGGESTED AMENDMENT TO THE BYLAWS OF CEC

CEC's new constitution and bylaws have weathered the first few months of their existence quite well. At this time, only one possible need for amendment has been suggested. The bylaws provide in Article VII that a member of the Board of Governors cannot succeed himself except after a lapse of one year. Thus, a person elected to filled out an unexpired term of one year would not be eligible to a term in his own right. Therefore, your executive committee, during its September 21-22 meeting, decided to petition for the amendment as shown below:

A PETITION TO AMEND THE BYLAWS ARTICLE VII, SECTION 2,d,1 OF THE BYLAWS OF THE COUNCIL FOR EXCEPTIONAL CHILDREN

The undersigned petition to amend the bylaws of The Council for Exceptional Children by changing Article VII, Section 2,d,1 to read as follows:

"No member of the board of governors who has served a full term is eligible to succeed himself, provided, however, that such a person shall be eligible for re-election to the same post after a lapse of one year."

(Signed) *Harrie M. Selznick*
Mamie Jo Jones
I. Ignacy Goldberg
Jack W. Birch
Nadine Chidley
June P. England
Frances P. Connor

The above amendment is hereby advertised six months prior to the next annual meeting of the delegate assembly as required by the CEC Constitution.

(Signed) *Leo F. Cain*
President

MONEY MONEY MONEY

The amount of money a person earns is certainly not the only measure by which others judge his worth. Regardless of the income bracket in which he finds himself, it is vital that he knows where his money comes from, how much he spends, and where it goes.

So it is with an organization such as the CEC. A member will be better able to appreciate some of the Council's problems, programs, and future needs if he understands its financial picture. The following figures and analyses are presented for this reason.

In studying this report, relationships can be seen and conclusions drawn that are not mentioned in the accompanying description. Figures may be interpreted in a variety of ways, depending upon one's understanding of the topic and his "mental set" toward it. In the descriptions given, no attempt has been made to place undue emphasis on either the improvements in the Council's fiancial picture or the problems it has yet to solve. The figures presented show what actually happened during the fiscal year; descriptions are intended to enable the reader to better understand some of the important factors involved in these figures.

The Council belongs to its members—not members to the Council. It should do the bidding of the membership through Delegate Assembly, Board of Governors, and Executive Committee action. These official bodies can best represent members who indicate how they think their organization should serve them.

To this end, members should carefully study the following report. They should look not only at the rising income but also at the rising expenditures. They should consider the various sources of income as well as the types of services purchased with that income. If adjustments are thought to be needed in regard to the Council's financial picture, the Board of Governors should be informed of such ideas and suggestions to the end that the Council's program will reflect more accurately the wishes of a democratic membership.

REPORT ON 1960-61 FISCAL YEAR

CEC accrued income for 1960-61 was $28,874 more than that of the previous year, and was $15,180 more than estimated in the budget. Every source of income exceeded budget estimates.

Total expenditures were also larger, by $33,149, than the previous year.

These figures are contained in the full report on CEC finances given to the Board of Governors on July 31, 1961. Five excerpts from this full report are of general interest in surveying the Council's financial status, and are published below. These excerpts are as follows:

I. Income and Expenditures
II. Comparison of Operating and Equipment Assets
III. Comparison of Inventory
IV. Comparison of Total Assets
V. Statement of Official Audit

In the following tables, "income" means total money received during the period of June 1 through May 31 adjusted to reflect the actual business of the fiscal year. "Expenditures" are the total cash payments also adjusted to reflect the actual business of the fiscal year.

The reader may find items of personal interest in these excerpts. Some highlights and supplemental comments are as follows:

Income from MEMBERSHIP was $12,637 over 1959-60, exceeding the budget estimate by $3075. Expenditures for membership activities (exclusive of the journal) rose $5047.

The increase in membership income over the previous year represents an increase in the number of members, but not in the same proportion. The headquarters office, as a service to federations, collects that portion of member's dues which covers membership in his state or provincial organization. This collection serves as a reimbursement to the office for funds previously advanced to the federations.

FISCAL YEAR, JUNE 1, 1960-MAY 31, 1961

I. INCOME AND EXPENDITURES

	Actual 1959-60	Budget 1960-61	Actual 1960-61
1. Income			
Membership*	$ 94,937.65	$104,500.00	$107,575.01
Subscription	9,538.96	9,500.00	11,509.32
Grant	7,006.00	3,500.00	5,005.00
Sales	5,291.32	12,000.00	13,864.22
Journal Advertising	5,631.02	5,500.00	6,758.54
Conventions	17,041.42	18,500.00	23,948.53
Miscellaneous	.00	.00	19.22
Total	$139,806.37	$153,500.00	$168,679.84
*Life membership not included.			
2. Expenditures			
Salaries and benefits	$ 57,729.58	$ 66,950.00	$ 68,954.07
Journal	30,468.23	31,500.00	31,052.89
Special Publications	3,621.57	10,000.00	10,531.05
Conventions	13,235.99	17,000.00	17,574.89
Membership	14,560.05	14,950.00	19,506.77
General Operations	13,339.74	13,100.00	18,599.07
Miscellaneous	.00	.00	.00
Sub-total	$132,955.16	$153,500.00	$166,218.74
Transfer to Contingency and Life Membership Accounts	958.43		843.93
Total	$133,913.55	$153,500.00	$167,062.67

II. COMPARISON OF OPERATING AND EQUIPMENT ASSETS

	June 1, 1960	May 31, 1961
Cash balance 160-26	$ 5,458.44	$ 3,913.20
Petty cash on hand	19.82	20.00
Cash advances outstanding	350.00	596.95
Total 160-26 cash	$ 5,828.26	$ 4,530.15
Accounts receivable	2,121.76	3,362.00
Gross 160-26 Assets	$ 7,950.02	$ 7,892.15
Accounts payable	— 3,512.88	— 3,177.16
Net 160-26 Assets	$ 4,437.14	$ 4,714.99
Supplies and inventory	4,020.62	9,713.78
Net 160-26 cash and supplies assets	$ 8,457.76	$14,428.77
Account 160-26 C Cash balance	7,768.57	8,476.50
Net operating assets available	$16,226.33	$22,905.27
Equipment inventory	2,160.73	3,902.27
Net operating and equipment assets	$18,387.06	$26,807.54

Account No. 160-26: General Operating
Account No. 160-26 C: Contingency

III. COMPARISON OF INVENTORY

	June 1, 1960	May 31, 1961
For Sale		
Publications		
Special	$ 873.38	$ 3,756.65
Monographs	997.41	1,425.37
Journals	201.00	280.00
Reprints	1,084.90	1,284.04
Selected References	44.00	19.80
Past President Pins	....	301.40
Complimentary		
Printed Forms & Literature	101.05	1,633.91
Membership pins, buttons, charms	115.20	21.60
Badge Holders	111.60	89.50
For Office Use		
Stationery	492.08	654.99
Postage	....	246.52
Equipment	2,160.73	3,902.27
Total	$ 6,181.35	$13,616.05

IV. COMPARISON OF TOTAL ASSETS

Assets	June 1, 1960	May 31, 1961
Cash balance, all accounts	$19,752.92	$27,485.11
Investments, U. S. Treasury Bonds	2,704.00	2,704.00
Petty cash	19.82	20.00
Cash Advances	350.00	596.95
Accounts receivable (Including life memberships)	22,904.76	26,315.50
Gross cash and investment totals	$45,731.50	$57,121.56
Inventories, total	6,181.35	13,616.05
Gross assets	$51,912.85	$70,737.61
Accounts payable	— 3,512.88	— 3,177.16
Net Assets	$48,399.97	$67,560.45

V. STATEMENT OF OFFICIAL AUDIT

1. Letter of July 14, 1961, from the auditing firm of Price Waterhouse, 1710 H Street, N.W., Washington 6, D. C., addressed to President Dr. Leo F. Cain, reads as follows:

   "In our opinion, the accompanying statements summarize fairly the recorded cash receipts and disbursements of The Council for Exceptional Children for the years ended May 31, 1961 and May 31, 1960 and its Operating and Life Membership Fund balances at those dates. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary."

2. Auditor's financial statement
   The cash receipts, disbursements, and balances for the fiscal year, just closed, as set forth in the auditors report, agree respectively, with the cash receipts, disbursements and balances presented for the same period in this report.

During the fiscal year just closed, the CEC headquarters office collected state federation dues in excess of the minimum rate established by the Delegate Assembly from three additional states (previously from California only), namely, Georgia, Illinois, and Texas. Therefore, part of the total increase in membership income represents the collection of additional dues from these three states rather than new memberships. By the same token, expenditures charged to membership activities were greater since the advances to these three states were increased accordingly.

The increased value of LIFE MEMBERSHIPS during the year was $9300, of which $2500 is still outstanding on time-payment plans. (Full value of total memberships is $39,000; total time-payments outstanding is $22,950.)

JOURNAL printing costs rose by $585 during the year while income from subscriptions rose $1970. Income from journal advertising increased by $1128.

CONVENTION expenses (exclusive of staff salaries) increased over 1959-60 by $4339 while convention income rose $6548. Two factors have influenced both income and expenditures this past year. One is the fact that two fall regional conferences were held instead of one, thus boosting costs as well as registrations. The other item is the increased registration fees effective at the Detroit convention. General registration was increased from $5 to $7, and single admissions were raised from $1 to $2. These increased registration fees resulted in a gain of approximately $2000 over income compiled at previous rate, thus placing conventions on a more self-sustaining basis.

Printing costs for other PUBLICATIONS rose from $3622 in 1959-60 to $10,531 in 1960-61, an increase of $6909. Income from the sale of publications during 1960-61 was $13,864, an increase of $8573 over the previous year. Also, the inventory value on publications in stock rose by $3565.

The value of INVENTORY items increased to $13,616, a gain of nearly $7500. Additional saleable publications in stock and office equipment account for the majority of the increase. Inventory values are computed on a "cost" basis and, in the case of publications, do not reflect "sales" value.

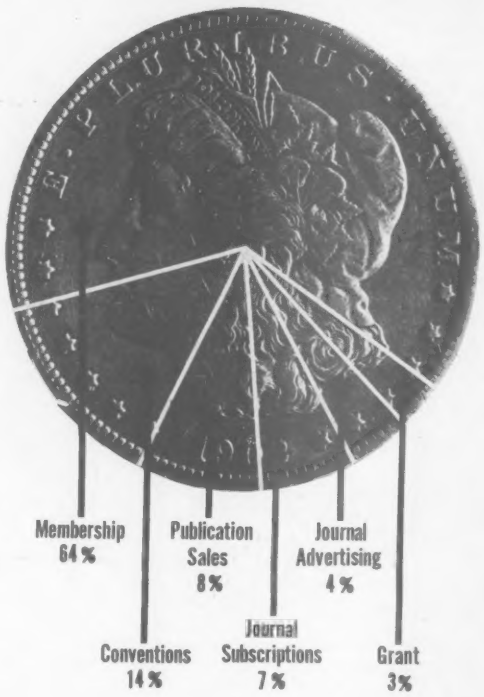
NET OPERATING AND EQUIPMENT ASSETS rose from $18,387 to $26,808, a gain of $8,421. Again, the increase can be attributed mainly to supplies, inventory, and equipment items.

TOTAL ASSETS of the Council showed a 39% gain over 1959-60. Net assets grew from $48,400, to $67,560, an increase of $19,160. Larger cash balance and inventory figures are principally responsible for the gain.

Where Does the CEC Dollar Come From?

As one would expect, the dues which members pay provide the major support for Council operation. Services would need to be drastically reduced, however, if this were the sole source of income. Approximately one third of every income dollar during 1960-61 came from sources other than membership dues. These other sources accounted for over $61,000 of the total income, and represent such items as journal subscriptions and advertising, a grant from the NEA, sale of publications, registration at conventions, and convention exhibit fees. The following illustration is based on income figures in Table I.

CEC INCOME DOLLAR, 1960-61



As reported previously, all sources of income exceeded that of 1959-60, and, in addition, exceeded budget estimates for 1960-61. There is reason to believe that these sources, with one exception, will continue to contribute increased amounts toward Council income. The exception is the NEA grant, which has been declining each year as the CEC has become more self-sustaining. One item that is expected to show a continued future increase is that of publication sales. Six new publications have been issued in the past 18 months, and sales of these items may not have reached their peak. Also, additional publications which are anticipated each year give further reason to expect this source of revenue to show continued growth.

Where Does the CEC Dollar Go?

The bookkeeping system used at CEC headquarters does not identify the specific portion of a staff member's salary which can be credited to a given type of central office service. For that reason, salaries (and benefits) are listed as a separate item in Table I. When they are separated in this manner, however, it is impossible to see how much is expended for a given type of service.

Using the best estimates available, salaries and benefits have been re-apportioned among the five major types of headquarters office services: general operations, journal, publications, conventions, and membership. These are shown in the illustration below, and are exclusive of inventory considerations.

CEC EXPENDITURE DOLLAR, 1960-61

About three-fourths of the expenditure dollar is used for items—membership, general operations, and journal—that are provided for or are available to the total membership at no additional purchase cost. Conventions and publications absorb the remaining one-fourth and are available on a charge basis since either choice or opportunity determine their use.

While the expenditures for conventions, publications, and the journal are reasonably self-explanatory, those for general operations and membership need further description.

General operations is an accounting term that covers many non-specific functions of headquarters operation. It is not synonymous with "overhead" or "administration" costs. It does include such costs, but it is also used in the accounting of costs connected with such items as committee expenses and legislation activities, and, further, includes costs in connection with the work of the Executive Committee, Board of Governors, and Delegate Assembly.

Membership expenditures include such items as cash advances to federations, scriptomatic membership cards and special processing equipment; chapter handbooks; CEC directory; charter and certificate forms; past-president pins and buttons; promotional and program development materials for chapters, branches, federations, and divisions; and a grant to the Committee on Canadian Affairs.

In interpreting the expenditure dollar, it is important to point out two factors that have contributed most to the increased expenditures over previous years.

One factor, small but significant, is the matter of inflation, felt in every aspect of Council expenses. Salaries have followed the general higher trend characterized throughout our total economy. Printing costs have edged upward, as have postal rates, supplies, equipment, and other services.

The single most important factor in the increase in expenditures lies in the additional services and expanded programs authorized by the official bodies of CEC. These include additional staff to handle the general operation of the headquarters office; new publications that represent a costly investment in inventory items but which promise to yield future income; increased size of the journal; two fall regional conferences, instead of one; improvement and modernization of office equipment to permit machine operation of certain records; and similar items.

A LOOK AT PAST RECORDS

The Council's income-expenditure level reached a new high during the 1960-61 fiscal year. It is interesting to see the pattern of growth during the past 11 years as reflected in the published reports of annual receipts. A look at these past records shows that in 1950-51, the CEC enjoyed an income of nearly $30,000. Last year, this figure rose to $168,679—over five and one-half times greater.

	Receipts	Percent Increase Over Previous Year
1950-51	$ 29,969	—
1951-52	39,846	33%
1952-53	52,276	31%
1953-54	56,674	8%
1954-55	71,129	25%
1955-56	78,747	11%
1956-57	87,776	10%
1957-58	99,970	14%
1958-59	106,217	6%
1959-60	139,806	32%
1960-61	168,679	21%

Each year has seen a substantial increase. The fiscal years ending in 1952, 1953, 1955, 1960, and 1961 show particularly noteworthy gains. While the gains of other years during this period were not so spectacular, each was a step forward to the present level of financial operation.

This continued growth record means several things. For one, it is a sign of professional prosperity—an endorsement by the profession of the CEC's basic aims and purposes.

In addition, it means that CEC's program of services has been expanded accordingly. For example, Volume 18 (1951-52) of the journal contained 256 pages; Volume 27 (1960-61) contained 536 pages. In 1951, the Council's only publication was its journal. Since 1954, the CEC has issued eleven paper-back books. The number of full-time staff members has increased from two in 1950-51 to eleven in 1960-61. Inflation has also had the same effect on CEC dollars as on those of the general public. Thus, some of the increased income has necessarily provided for inflated costs.

Probably the most significant element of this ten-year growth record is the dynamic activity that has taken place on the local, state, and provincial levels. Membership, during the ten-year period, has increased from six to fourteen thousand; state-provincial branches went from two to ten; federations from two to twenty-eight. The increased tasks given to the international office have come about largely because of the support and activity of these state and provincial units.

SUMMARY

In concluding this report on CEC's finances, it is appropriate to say that Council members have reason to be encouraged with the overall financial condition of the CEC. Income has held up well during a period of rising costs, thus permitting an increase in expenditures for continuing and expanding past services, as well as making possible the development of plans for new services.

There are many new areas of CEC activity that can legitimately be pursued as soon as the ways and means are available. There are some activities now being undertaken that will deserve larger budget allocations for their successful fulfillment.

The implications of the above report give reason for CEC members to take pride in these evidences of a growing and responsible organization.

WHO ARE YOUR CHOICES FOR OFFICERS?

Deadline: November 15

A most important opportunity for you to express your opinion in an election is at nomination time. The nominations committee is about ready to begin balloting on 1962 candidates—including candidates of your choice if you submit their names. The deadline for doing so is November 15—the procedure is described below.

Current Vacancies

There are five vacancies on the Board of Governors to be filled for the term 1962-1965 for which open nominations will be accepted. For the Canadian vacancy, the nominations committee will solicit candidates from the Committee on Canadian Affairs.

Office	Incumbent
President-Elect	Mamie Jo Jones
First Vice President	June P. England
Governor-at-large for U.S.	Harrie Selznick
Governor-at-large for Canada	Nadine Chidley
Wisconsin member	Ingeborg K. Severson

Governors representing states and provinces are elected for a three-year term on a fixed cycle basis. (See Table 1.) The term (June 1—May 31 three years later) is based on the administration year.

Procedures for Submitting Names

Any member of the Council may suggest names for the five Board of Governors vacancies. A person or chapter suggesting a name should keep in mind that the candidate's chances will be best if:

- He or she has been a Council member for a number of years
- He or she has been prominently active in Council affairs—on local, state, provincial, or international levels—such as committee work, participation on convention programs, holding office, contributing articles for publication, etc.

In submitting the name of a candidate, the following information should be included in writing:

- Office for which suggested
- Current position or title, and complete address
- Approximate length of membership in CEC
- Chapter or division affiliation, if any
- Official support, where such has been given, by a chapter, branch, federation or division, including the date the vote was taken
- Council activities in which the candidate has engaged
- Other major contributions he or she has made to special education
- A statement of recommendation for nomination indicating that the candidate is considered to be a qualified, responsible individual who would accept if nominated and serve ably if elected.
- Name, address, date, and chapter affiliation (if any) of person submitting candidate's name.

All names for the five vacancies on the Board of Governors should be submitted by November 15 to

the chairman of the nominations committee, Jack W. Birch, Department of Special Education, University of Pittsburgh, Pittsburgh, Pennsylvania.

Balloting Procedures of the Nominations Committee

After the chairman receives the suggestions for candidates he prepares a ballot listing all suggested candidates for each office. A ballot is mailed to each member of the committee. (Under the new constitution, the federation and branch-elected members of the Board of Governors automatically serve as the Nominations Committee with the CEC immediate past president as chairman.)

Each member of the nominations committee votes on the entire list of candidates for any one office by assigning a rank order of choice to each, with his first-choice candidate receiving a rank of "1," second choice, "2',, etc. Marked ballots are returned to the chairman for tabulations.

The chairman receives the ballots and determines the committee's choice in the following manner:

- If any candidate receives a majority of first-place rank votes (51% or more), he is nominated.
- If no candidate for a particular office receives a majority of first-place votes the chairman computes a "total score of ranks" for each candidate. This is a total of all ranks assigned to a candidate. He receives one point for each first-place rank, 10 points for each tenth-place rank, etc. Candidates with the lowest total rank scores are the most preferred.

The ballots submitted by the committee members are then reconstructed to eliminate all names except the four candidates who received the lowest total rank scores. These remaining four are assigned ranks of one, two, three and four on each ballot in the order they are listed. (It is assumed that if these four were the only candidates on the ballot, the committee member would have preferred them in the same relative order.)

The number of first, second, third and fourth ranks are totaled for each of the four remaining candidates. If one receives a majority (51%) of first place votes, he is considered nominated. If no candidate has such a majority, the one with the lowest number of first place votes is considered defeated. Ballots which gave him a first choice would be examined to determine the re-distribution of first-place votes among the three remaining candidates. This procedure is successively applied until a candidate receives a majority of first choice votes.

Thus, the single slate of nominees selected as described above will be presented to the Delegate Assembly for their action at the annual convention in Columbus this April.

State and Provincial Elections

States and provinces with 100 or more CEC members are represented on the Council's Board of Governors. If such a state or province possesses a branch or federation, that unit nominates and elects its member and notifies the Council of its action. If there is no such unit the board member is elected by the CEC Delegate Assembly in the manner outlined above.

In addition to the five vacancies on the Board of Governors subject to open nomination, there are 11 additional vacancies that will be filled by the states and provinces concerned. These vacancies are not open to nomination by the total membership.

Office	Incumbent
Ohio	Roy E. Ferguson
Oklahoma	A. Leroy Taylor
Oregon	John E. Taylor
Pennsylvania	Gertrude A. Barber
South Carolina	Mary Louise Schroder
Tennessee	W. Lloyd Graunke
Texas	Nova Lee Dearing
Utah	Kate Fenton
Virginia	Jennie Brewer
Washington	Dorothy Johnson
West Virginia	Sarah L. C. Stevens

Table 1—Fixed Cycle Basis

Representation on the Board of Governors (as well as on the membership and legislation committees) runs concurrently for states and provinces represented. The following cycle has been established by the delegate assembly:

Cycle I 1960-1963 and each three-year cycle thereafter	Cycle II 1961-1964 and each three-year cycle thereafter	Cycle III 1959-1962 and each three-year cycle thereafter
Alabama[c]	Maine[c]	Ohio[a]
Alaska[e]	Maryland[a]	Oklahoma[b]
Arizona[e]	Massachusetts[d]	Oregon[a]
Arkansas[c]	Michigan[a]	Pennsylvania[a]
California[a]	Minnesota[a]	Rhode Island[c]
Colorado[a]	Mississippi[e]	South Carolina[a]
Connecticut[a]	Missouri[a]	South Dakota[e]
Delaware[c]	Montana[e]	Tennessee[a]
Florida[a]	Nebraska[a]	Texas[a]
Georgia[a]	Nevada[e]	Utah[b]
Hawaii[e]	New Hampshire[e]	Vermont[e]
Idaho[e]	New Jersey[a]	Virginia[a]
Illinois[a]	New Mexico[e]	Washington[a]
Indiana[a]	New York[a]	West Virginia[a]
Iowa[a]	North Carolina[a]	Wisconsin[d]
Kansas[d]	North Dakota[c]	Wyoming[c]
Kentucky[a]		
Louisiana[d]		

Alberta[e]	Manitoba[b]	Prince Edward Island[c]
British Columbia[e]	New Brunswick[e]	Saskatchewan[e]
Ontario[a]	Newfoundland[e]	Quebec[e]
	Nova Scotia[e]	

[a] Possess a CEC federation
[b] Possess a branch of 100 or more members.
[c] Possess a branch of less than 100 members.
[d] Possess 100 or more members but with neither a federation nor branch.
[e] Possess less than 100 members and no branch.

NEWS AND NOTES

■ Two members of the Chicago Chapter of CEC were among the first five recipients of the Howard Willett Awards for distinguished teaching service in Chicago. The 1961 awards went to Mrs. Mellissa McMichael, Recreational Therapist at the Christopher School for Physically Handicapped Children, and to Jessie Larson, teacher of advanced educable mentally handicapped girls at the Reilly School.

According to the terms of the grant to the Chicago Public Schools by Howard Willett, a former president of the Illinois Association for Crippled Children and Adults, two teachers of special education and three English teachers are annually awarded $1000 each for travel or study, on the basis of their outstanding record of teaching over a period of years.

■ The newly established Committee on Divisions and Affiliates met at CEC headquarters in Washington, September 19-20. The purpose of this meeting was to discuss the relationships between divisions and the CEC and to formulate possible ways to strengthen division programs.

■ CEC's Executive Committee met in official session at headquarters on September 21 and 22. Highlights of their discussion will be presented in a future issue of the Journal. Another meeting of this committee is planned for January.

■ J. E. Wallace Wallin, oldest survivor among the nation's original clinical psychologists and special educationists, has returned to active administrative duties as executive director of Industries Limited in Carlisle, Pennsylvania. Industries Limited is a facility for the evaluation, training, and employment or placement of adolescent and adult mental retardates.

■ The Southern Regional Education Board has announced that seven Southern states have now appropriated funds for supporting the education of teachers of visually limited and hearing impaired children at regional centers at George Peabody College for Teachers, the University of Tennessee, and the University of Texas.

Florida, Georgia, Kentucky, Maryland, Tennessee, North Carolina and West Virginia have now provided funds for this special education program. Peabody College, which is the regional center for preparation of teachers of visually limited children, is actively engaged in identifying students for this program. The University of Tennessee and the University of Texas are making similar efforts for teachers of hearing handicapped children.

The assistance of CEC members throughout the Southern region is sought to assist in the implementation of these programs with promising young people for careers in teaching these children.

■ Foreign Posts will be open for United States citizens in Army-operated schools for American children in Korea, Japan, Okinawa, Germany and France for the 1962-63 school year. While the greatest number of openings will be for elementary teachers experienced in the primary grades, more elementary teachers with special training in remedial reading, speech correction and mentally retarded are needed each year.

■ Appointment of Miss Eleanor J. Bader as program consultant to the National Society for Crippled Children and Adults has been announced by Dean Roberts, M.D., executive director. As a professional staff member, Miss Bader will give consultation and assistance in the development, organization, staffing and operation of rehabilitation programs serving crippled children and adults under the Easter Seal banner.

■ The September 1961 Directory of Special Education personnel in State Education Departments has been released by the U. S. Office of Education. It was compiled by Romaine P. Mackie, Chief, Section on Exceptional Children and Youth.

■ Richard C. Schofer has been appointed to the staff of the Section on Exceptional Children and Youth of the U. S. Office of Education. Dr. Schofer's major responsibilities pertain to the graduate fellowship program in the field of the mentally retarded as made possible under the provisions of Public Law 85-926.

■ Gallaudet College has recently published *Portraits of Performance,* a brochure designed mainly for distribution to employers. The purpose of the brochure is to describe the advantages of employing deaf college graduates. It was made possibly by a $5000 grant to Gallaudet College by the Sears-Roebuck Foundation in 1960. Copies may be obtained from the Office of Public Relations, Gallaudet College, Washington 2, D. C.

■ A two-year research project on "New Methods of Language Development in Deaf Children" will be undertaken by Gallaudet College this year under the combined direction of three staff members: Robert Frisina, Howard Roy and Jerome Schein. The purpose of the study is to find a method by which deaf children can acquire language at an earlier age than they normally do. The project will give initial emphasis to adapting methods using visual aids which have been employed with normally hearing children, to the special needs of the deaf child.

■ Jo Anne Couse has joined the State Department Staff in Florida as a Consultant in Exceptional Child Education with special emphasis on rural and sparsely populated county school systems. Miss Couse was formerly Coordinator of Exceptional Child Education in a five-county area in southern Florida.

INFORMATION

for your present and future use

Below is a condensed version of the style guide for authors who may wish to contribute manuscripts for publication in Exceptional Children. If you are interested in obtaining a complete copy of the style guide, address your request to CEC headquarters.

Professional Nature of Journal

Exceptional Children is a professional journal concerned with problems, research findings, trends, and practices in educational programs for children who are blind, crippled, deaf, gifted, hard of hearing, mentally retarded, partially seeing, socially handicapped, emotionally disturbed, neurologically handicapped, or who have communication problems or special health problems. With the exception of a modest space allotment for the "Bulletin" section, which contains news items of interest to CEC members, the material published is directed toward professional, rather than organizational, problems and issues.

EXCEPTIONAL CHILDREN is circulated to more than 15,000 readers (in the United States and Canada) who are professionally affiliated with educational programs for atypical children. These are school administrators, teachers, teacher educators, supervisors, consultants, clinicians, psychologists, social workers, and others.

Publication Policies

Unsolicited Manuscripts. Unsolicited manuscripts are welcomed. An unsolicited manuscript will be accepted for review provided that (a) it is not being considered concurrently by another publisher, (b) the CEC may have exclusive option on possible publication for a period of three months following its receipt, and (c) the author assumes responsibility for publication clearance.

Appropriate Material. In order to be considered for publication, a manuscript must report and/or interpret some phase of scientific findings, practical experience, or case history that leads to an improved understanding of the exceptional child or of educational programs for him. Integrative articles, or critical reviews, and general conceptual presentations are also considered. The subject matter must be authentic and substantiated whenever the information is new or the point of view is not generally accepted. Manuscripts must be pruned of obvious statements familiar to everyone.

Acceptance Policies. All manuscripts are carefully reviewed by the editor and by one or more associate editors expert in the particular area under consideration. Manuscripts that do not meet professional standards or editorial requirements will be returned. Authors of approved manuscripts may be requested to make major revisions prior to final acceptance. The editor reserves the right to make minor editorial changes of a non-substantive nature.

Author Responsibility. Authors are responsible for the authenticity of all quoted matter and of bibliographic citations, and obtaining permission from the original source for quotes of 150 or more words. Authors receive galley proofs in order that they may check and validate the accuracy of technical elements, such as statistical data, illustrations, and the like.

Remuneration. Articles published are considered a contribution to the profession, and no remuneration is made to authors. Complimentary copies of the issue, and reprints at special rates, are made available for private circulation to all authors.

Preparation of Manuscripts

Editorial requirements for EXCEPTIONAL CHILDREN include the following:

Copies. Only one original, double-spaced copy should be submitted.

Length. Manuscript length may vary according to the subject. However, those most adaptable to space requirements are between five and 15 typewritten pages in length (1200 to 4500 words).

References and Quotations. Every reference and quotation cited in the text should be listed at the end of the manuscript under the heading, *References*. They should not be given as footnotes. If citations or references are not included within the text, the author is encouraged to include a short list of highly selected readings on the topic covered under the heading, *Selected Bibliography*. In either case, the listings should be alphabetically arranged by author's surname. Authors are advised to consult Section 4.7 (amended) of the Publication Manual, 1957 Revision, of the American Psychological Association for recommended form of references and quotations in the text. Short quotations should be included as regular lines of text; long quotations double-spaced and indented on both margins.

Numbers. Numbers one through nine should be written out in the text. Figures should be used for numbers 10 and larger.

Graphs and Charts. When the inclusion of graphs and charts is essential, the author is encouraged to supply glossy prints, ready for engraving.

Tables. Tabular material should be prepared consistent with common practice in professional and scientific publications. The text accompanying any table should interpret or show inferences drawn from the table and not merely repeat facts which are clearly presented in the table.

Language. The language used should be directed toward effective communication consistent with professional writing. "Newspaper style" writing is not generally acceptable. The individual writing style of authors will be respected as long at it is considered to be effective communication.

Research Reports. Reports of research projects should follow traditional outline form. A *brief* introduction (without a heading), followed by sections entitled *Problem, Methods, Results, Discussion*, and *Summary* are those usually included.

Differential Responses of Mentally Retarded Children on the Leiter Scale

BETTY M. HUNT

THIS exploratory study has a two-fold purpose. Primarily it is an attempt to determine if mentally retarded brain injured children respond to the Leiter International Performance Scale in terms of specific perceptual difficulties. It has been stated that mentally retarded brain injured children cannot be lumped together in experimental populations. Some who have difficulties in activities requiring visual motor skills or in gaining meaning from two-dimensional tasks would have difficulty in responding to materials requiring these skills. Others may not encounter this difficulty.

This present investigation is an attempt for experimental validation of certain descriptive classifications used in educational research classes with mentally retarded brain injured children as a basis for differential teaching methods. These classifications were promulgated by Lise Gellner (1959) who established the original criteria for the diagnosis of four disability areas based on the concept that learning handicaps result from specific perceptual losses due to structural or biochemical damage somewhere in the cerebral systems of vision and audition. Gellner stipulates the presentation of classroom materials on the basis of the child's highest level of performance rather than forcing him to respond to materials within his major disability area. In addition, this study includes an investigation of the performance of mentally retarded children classified as familial on the Leiter Scale.

The Leiter International Performance Scale (1948 Revision) was selected because of the visual content of many of the items. It is necessary to realize that other processes are also involved in this test; concept formation, reasoning, and other integrative functions. However, it was postulated that in spite of this, those mentally retarded children who did not have specific disabilities in gaining information from two-dimensional materials or in using visual materials would perform at a higher level on these tasks. Therefore, the following hypotheses were stated in null form.

Hypothesis 1. Mentally retarded brain injured children with minimal visual handicaps and no recognizable loss in visual acuity will not earn significantly higher scores on the Leiter Scale than mentally retarded brain injured children, with no recognizable loss of visual acuity, classified as handicapped in responding to visual motor activities, form discrimination and/or in gaining meaning from two dimensional visual stimuli.

Hypothesis 2. Mentally retarded brain injured children with no recognizable loss in visual acuity and with minimal handicaps in responding to visual motor activities, form discrimination, and/or in gaining meaning from two-dimensional visual stimuli will not earn significantly higher scores on the Leiter Scale than mentally retarded children diagnosed as familial.

Hypothesis 3. Mentally retarded children diagnosed as familial will not earn higher scores on the Leiter Scale than mentally retarded brain injured children with no recognizable loss of visual acuity, classified as handicapped in responding to visual motor activities, form discrimination, and/or in gaining meaning from two-dimensional visual stimuli.

Method

Subjects. The *Ss* were 90 mentally retarded children divided into three groups: (a) thirty mentally retarded children diagnosed as familial, (b) thirty mentally retarded brain injured children, with no medically recognized loss of visual acuity, classi-

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fied as handicapped in responding to visual motor activities, tasks of visual discrimination, and/or in responding to two-dimensional materials, and (c) thirty mentally retarded brain injured children with no medically recognized loss in visual acuity and with minimal handicaps in responding to visual motor activities, tasks of visual discrimination, and/or in gaining meaning from two-dimensional materials. The area of handicap for this latter group is in another perceptive field, i.e., auditory.

The groups were matched with respect to MA, CA, and IQ obtained on the Stanford-Binet Intelligence Test. Table 1 presents identifying information about the groups. The assumption of homogeneity of variance was met in each of the three variables.

(b) In most cases, although not all, there was a personal history of illness or injury to which the subject's condition was attributed. The selection of the 30 children in the familial group included the requirements that other mentally retarded individuals were in the immediate families or in close relationship, and that neurological examinations were essentially negative.

Procedure. The Leiter International Performance Scale (1951) was administered and scored according to standard instructions with one exception. *Ss* who did not pass the required tests at the Year II level and therefore received no basal year were credited with tests passed within that year level. For example, *Ss* passing one test with three months credit under Year II received MA of one year and three months. If the *Ss* failed all tests they were given a minimum age level of one year. MA in terms of months was used as the criterion scores.

Table 1
Descriptive Statistics on Ss

		CA			MA			IQ		
Group	N	Range	M	SD	Range	M	SD	Range	M	SD
BI-VD*	30	7.7-19.8	12.62	3.1	3.3-9.7	5.83	1.5	26-68	48.90	9.7
BI-NVD**	30	6.0-16.9	11.80	2.8	2.7-9.3	5.74	1.8	30-69	49.90	11.8
FAM	30	7.0-17.8	12.18	2.7	3.0-8.4	5.96	1.5	26-70	50.53	10.4

***VD**-Visual Disability
****NVD**-No Visual Disability

The diagnoses as to etiology were made by a classification committee of the Receiving Center of the Columbus State School. The 60 brain injured children were selected from a larger group of children who had a diagnosis of brain injury and who had also received classifications on the basis of criteria stated by Gellner (1959) in her behavioral descriptions of the four disability groups. The perceptual abilities were determined by the performance of the children on certain tasks that Gellner states are indicative of a disability area—for example, poor recognition of form, poor eye-hand coordination. In addition, the two groups of brain injured mentally retarded children met the following criteria:

(a) The social histories indicated no other mentally retarded members of the immediate families. There was one exception to this wherein other factors were felt to be responsible for injury to two members of one family. This criteron has been stated with caution as histories are not sufficiently complete to exclude deficiencies in distant relatives.

Results

Results have been analyzed and presented in tabular form. Table 2 shows the *t* ratios based on related samples for the three groups of mentally retarded children. The difference between mentally retarded non-visually handicapped brain injured children and mentally retarded visually handicapped brain injured children was significant beyond the .05 level. This allowed for a rejection of Hypothesis I. There were no other significant differences; therefore, Hypotheses 2 and 3 were not rejected. Since each hypothesis was stated independently and all the possibilities (group 1 vs. group 2, group 1 vs. group 3, and group 2 vs. group 3) were tested, it is necessary to realize the probability of a significant result at the five percent level is somewhat greater than the ordinary two group design. A discussion by Ryan (1959) indicates possible errors and difficulties in multiple comparisons in psychological research. A Bartlett's test

Table 2

Performance of the Matched Pairs of Mentally Retarded Children on the Leiter International Performance Scale

Group	Mean	SD	t
Brain injured-NVD*	63.90	31.98	2.20***
Brain injured-VD**	54.30	26.76	
Brain injured-NVD**	63.90	31.98	1.02
Familial	57.30	23.14	
Familial	57.30	23.14	.71
Brain injured-VD	54.30	26.76	

*NVD designates brain injured with no visual disability.
**VD designates brain injured with visual disability.
***P < .05 The probabilities used are for a two-tailed test of significance.

(Edwards, 1950) revealed variances of groups to be homogeneous.

Table 3 indicates the correlation coefficients for the three sub-groups on CA, MA, IQ, and criterion score. When items were grouped into two major categories, visual and conceptual, the mentally retarded brain injured children with minimal visual handicaps scored higher to a significant point on both types of items.

Discussion

There have been repeated controversies on the behavioral patterns and working habits of mentally retarded brain injured children. Strauss (1947) indicated that visuo-motor disorder and emotional disturbance were primary factors in the diagnosis of brain injury. In additional investigations with children of a lower performance level than those in the Strauss studies, Zeaman, House, and Orlando (1958) cite evidence that mental retardation may be associated with difficulties in ability to solve visual discrimination problems.

It is our contention that there is no typical picture of mentally retarded brain injured children. If visuo-motor disorder, emotional disturbance, clinical picture, and mental age were key factors in this performance of mentally retarded brain injured children, one would predict similar performance from both groups. This did not occur. The mentally retarded brain injured children who had other handicaps, such as expressive language difficulties, showed a higher performance level.

As one can see by examination of the results, there were no significant differences between either mentally retarded brain injured group and familial children. There appeared to be some mentally retarded familial children handicapped in visual perception but not a sufficient number to lower their performance below the level of the visually handicapped brain injured group. This is in accord with the results of Bensberg and Sloan (1951) who found that brain injured defectives performed essentially the same on the Leiter as did the familial subjects, not only in regard to total performance but also on sub-test performance. Therefore, it does not seem beneficial to restrict differential teaching methods to any one etiological group. Ability to use and handle materials should be encouraged regardless of previous etiological diagnoses. Additional research wherein mentally retarded children are classified in terms of visual and non-visual disabilities would seem warranted.

These results seem to have implications for future diagnostic instruments. It no longer seems sufficient to use visuo-motor disability or deficiency in visual perception as primary criteria of brain injured behavior. Tests which rely exclusively on visuo-motor performance of brain injured children, mentally retarded or not, seem to require additional validation before generalizations in terms of a generic class can be substantiated. It seems necessary to allow mentally retarded children, regardless of diagnosis, to function wherein they can have the highest degree of success.

Table 3

Pearson r Correlations between Criterion Score and CA, MA, and IQ for the Three Sub-Groups

Group	r
Brain injured-VD—CA*	+.58
Brain injured-VD—MA	+.85
Brain injured-VD—IQ	+.57
Brain injured-NVD—CA**	+.52
Brain injured-NVD—MA	+.77
Brain injured-NVD—IQ	+.45
Familial—CA	+.55
Familial—MA	+.89
Familial—IQ	+.38

*Brain injured-VD refers to a brain injured child with a visual disability.
**Brain injured-NVD refers to a brain injured child with no visual disability.

The scope of this study is confined to this one area, and no hypotheses are being made at present regarding the importance of etiology as related to behaviorial syndromes and the many other characteristics of brain injured children noted in the literature.

Summary

This study was an investigation of the responses of three groups of mentally retarded children to the Leiter International Performance Scale (1948 Revision). Two of the groups were designated as brain injured and the third as familial. The children within the brain injured groups were classified on the basis of individual performance in response to materials and tasks that Gellner considered to be indicative of her four disability groups. In spite of adequate visual acuity, one group showed extreme difficulty in handling visual motor activities, tasks of visual discrimination, and/or in responding to two-dimensional activities. The other brain injured group showed minimal difficulty in the above mentioned areas. The primary disabilities for these children were in response to auditory stimuli.

Children in the brain injured group described above who showed severe difficulties in the visual area scored lowest on the Leiter test. The mean difference between this group and the brain injured group with minimal difficulties in responding to visual materials was significant beyond the .05 level.

Null hypotheses 2 and 3 could not be rejected. Mean scores of children in the familial group were not significantly different from mean scores of either brain injured group. The mean of the familial group fell between the scores of the two brain injured groups.

There seemed to be a high positive relationship between performance on the Leiter and MA obtained on the Stanford-Binet. Mentally retarded brain injured children with minimal visual handicaps received higher scores on both visual and conceptual items.

It is suggested that analysis of handicap should not be confined to children known to be brain injured. Special areas of handicap may exist without relation to factors of etiology or mental level, and teaching methods should be differentiated accordingly.

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The Prediction of Academic Achievement in Brain Injured Children

ISIDOR W. SCHERER

THE purpose of this investigation was to identify relevant variables which would significantly contribute to the long-range prediction of academic achievement in brain injured children. More specifically, its objective was to determine the intellectual, personality, and physical status variables which might predict successful academic achievement in these children. Such a study is important because the clinical psychologist is continually called upon to make predictions in this area. Unfortunately the criteria for making prognostications of academic achievement are generally vague and ill-defined. As a consequence the clinician, more often than not, is compelled to rely on intuition (Haeussermann, 1952; Taylor, 1959). It was hoped that this study, which addresses itself to a practical problem, would enable such prognoses to be made more objectively by providing empirical guidelines (Denhoff, 1950).

In contrast to ideal settings, such as universities and medical schools, the psychologist is usually affiliated with a rehabilitation center, nursery school, small general hospital, or a clinic. In these settings information about patients is furnished primarily by various medical ancillary service personnel, i.e., speech therapist, occupational therapist, physiotherapist, etc. It was assumed therefore that if correct predictions could be made in the particular setting in which the present data were obtained, a general rehabilitation center that emphasizes primarily the diagnosis and treatment of a cerebral palsy population, then it would be possible to utilize the results in other similar or related settings.

• ISIDOR W. SCHERER is Chief, Psychology Service at the Veterans Administration Hospital in Northampton, Massachusetts. This study was supported by a grant from the Easter Seal Research Foundation. Appreciation is expressed to Robert Van Wart and Ruth Curtis, former directors of the Bay State Rehabilitation Center, Springfield, Massachusetts, where the study was carried out, and to Dr. Arnold Trehub, Louis Nidorf, Donald Skwire, Dr. Norman Tallent, and Eileen Kirby.

Variables Utilized

There is reason to believe, however, that there are variables other than intellectual, personality and physical status which are important, about which information is not on hand, and which would be necessary for successful prediction. Among these are: (a) information concerning the kinds of academic readiness programs to which the child will be exposed, either at home or in a formal teaching situation; (b) possible effect of future diseases and accidents; (c) the child's future interpersonal environment. The emotional development of the disabled child (Scherer, 1952) has not been sufficiently delineated to hypothesize about the nature of growth and development even in an optimum environment.

It is relevant to note that the IQ for a cerebral palsy population shows greater variability over a period of time than for the normal population, and hence the predictive potential of the IQ is reduced (Bayley, 1949; Hohman, 1959; Strother, 1952). Despite the limitations described above, this study attempted to identify variables which would predict academic achievement from the various kinds of information which were available during initial clinic testing, i.e., psychological tests[1], case data, and medical records. The specific variables utilized for this study are described below.

[1]The initial test battery for the sample described consisted of the Stanford-Binet Form (L) and the Vineland Social Maurity Scale in all cases. In addition, in certain cases, the following tests were also administered: Full Range Picture Vocabulary, Kuhlman-Binet, Wechsler Intelligence Scale for Children, Cattell Infant Intelligence Scale, Leiter International Scale, Wide Range Academic Achievement Scale, Doll Play, Blacky Pictures, Rorschach, Oseretsky Motor Scale, and an interview. In the follow-up testing session, the battery included only the Wide Range Academic Achievement Scale, the Full Range Picture Vocabulary, Vineland Social Maturity Scale, and an interview questionnaire.

The Estimate of Intelligence—the Stanford-Binet, Form L

When a psychologist is asked to predict the academic progress of a child who has a cerebral defect, in most clinics he is likely to utilize the Stanford-Binet. When this study was initiated, it was the best standardized instrument for measuring intelligence for the age levels concerned. Because of its widespread usage by research as well as clinical workers, the Stanford-Binet was employed as a predictor of academic achievement more often than other tests and consequently was more subject to criticism (Lord, 1937, p. 29). Since the psychologist knows that it is practically impossible to administer the entire test in accordance with standard procedures, he takes certain necessary liberties which alter the usual meaning of the derived score. For example, particular verbal items may be deleted when a speech disability exists and motor tests eliminated with muscular dysfunctions.

The Estimate of Academic Achievement

The estimate of academic achievement score was obtained from the Wide Range Academic Achievement Test (Jastak & Bijou, 1946). Experience with reports from parents and teachers about the child's success in school and grade placement have shown little relevance to either the academic achievement scores obtained by the examiner, or the IQ. The issues of social promotion and the influence of the neighborhoods where the children lived upon the type of school in which they were placed played too large a role in determining class and grade placement. Therefore grade levels would be a poor variable in a controlled study. The Wide Range Academic Achievement Test was selected as a better measure of academic achievement. Estimates of performance in three basic skills—reading, spelling, and arithmetic—may be derived from this test. There are also some significant limitations, e.g., the test provides no measure of word comprehension.

The Estimate of Social Adjustment—the Vineland Social Maturity Scale

A modified Vineland Scale permitting additional weights for some responses, and based on knowledge of social behavior not included in the original scale, was included in the final estimates of the child's social maturity. These limitations are particularly pertinent at the lower age levels, where those with minimal motor impairment, and good speech are likely to do much better than those who are physically disabled.

The Evaluation of Organicity

The behavioral effects of organicity were entered on a four-point scale in accordance with the observations of one examiner on a number of usually accepted qualitative, organic characteristics. Among the latter were perserveration, meticulosity, figure ground difficulty, distractibility and restlessness. The reliability of the ratings was estimated by a re-examination of the child after a period of one month and comparison of the ratings.

Adjustment to the Test Situations

Adjustment to the test situation was rated on a five-point scale by the examiner and reliability was checked in the same manner described for ratings of organicity. This was based upon such items as cooperativeness, effort, interest and energy. Because brain injured children are noted to be more stimulus-bound than non brain injured, the effect of examiner variability and setting are likely to alter considerably the test results. The problem is not one of how well the child adjusts to a standardized testing situation.

Adjustment to the Home Situation

Frequently, the parents did not offer dependable information. In many instances, they were very anxious to obtain the approval of the psychologist for the admission of their children into the rehabilitation center. Thus the parents would "forget" important facts, or refuse to offer negative information about the child's adjustment at home. A mother who wanted a great deal of information about handling the child would bring up everything she thought would be of interest and would show the difficulties she was having with the child. On the other hand, many mothers would attempt to deny, or avoid completely, material that would be of help, but which, at the same time, would put their child in a negative light. It was surprising how many mothers who were essentially honest simply wanted to forget or deny symptoms, since in conversation they would spontaneously bring up material which they did not recall during the direct interview.

The emotional adjustment item was based on a prepared symptom rating scale so that in this area there was consistency in the questions asked the parents. Among the symptoms were enuresis, nail-biting, fears, aggression, restlessness and stealing.

Physical Status

The evaluation of this factor was determined by a study of the clinical record with respect to each of the following items: vision, hearing, motor, and speech. One finds extensive literature which points to the numerous disabling physical variables which appear to interfere with general learning or academic efficiency. If all of these variables were to be taken seriously, one would doubt that the child who has a cerebral injury can learn at all.

For example, turning to the problem of reading, one would ordinarily find many physical factors as well as other variables involved in the ability of the child to learn to read (Brueckner & Bond(1955, chap. 3, 4; Rapoport, 1957; Smith, 1955; Street, 1958)—hearing, eye and hand dominance, visual acuity, neurological involvements, cardiac conditions, physical vitality, speech defects, emotional adjustment, social adjustment, general family adjustment, economic security, etc.

Yet the writer has seen numerous children in his practice who suffer from many disabling physical conditions and who also are confronted with other disturbing factors such as emotional conflict and poor home conditions, but who still manage to perform quite adequately in reading and other basic academic skills.

Other physical variables which were not mentioned may have a serious effect on academic status, yet we are unable to predict their effect since we cannot determine their ultimate status. For example, we cannot determine whether convulsions will continue to get worse or disappear. We cannot judge the effect that additional episodes may produce.

Subjects

There were 46 subjects (24 females, 22 males), each of whom was tested twice. During the first testing period, the average age of the members of this sample was five years and two months.

Because of the apparently conflicting statements in the medical case records relative to etiology and diagnosis, no breakdown is offered of the specific types of brain injuries diagnosed. Case study of etiology or nomenclature revealed that what appeared to be a conflicting diagnosis was essentially the result of different approaches or different points of view with the variable of time also making for conflicting opinions (Denhoff & Raymond, 1955). The shifting and variable diagnostic statements made it more appropriate to apply the general term, brain injury, rather than a specific diagnosis. The use of a generic diagnosis is a serious limitation because the population is not defined sufficiently well to permit repetition of the study. The air of research respectability which might be suggested by the use of specific diagnostic terms would simply obscure the fact that a major weakness in research with this population has been the inability to precisely define or classify the condition dealt with.

The types of disabilities noted in the sample were speech 87%,, motor disabilities 83%, visual impairment 41%, and hearing complications 22%. The average Stanford-Binet IQ level of the patients at initial testing was 87 (S.D. = 21.2).

Results

Statistical study was made of the predictive potential of the following variables: Stanford-Binet, social adjustment, organicity, test adjustment, home adjustment, and physical status, as they relate to academic achievement. Utilizing the method of sequential analysis (Trehub & Scherer, 1958), the predictor variable, the Stanford-Binet, was checked against the following three predicted variables—reading, spelling, and arithmetic.

The observed percentage of correct prediction within a tolerance band of $\pm$ 15 Reading academic quotient (AQ = Academic Age over Chronological Age) points was 60%. Within this tolerance band, we can expect to predict correctly in 50% to 70% of the cases ($\alpha = .05$, $\beta = .05$). The observed percentage of correct prediction within a tolerance band of $\pm$ 15 Spelling AQ points was 52.5%. Within this tolerance band, we can expect to predict correctly in 40% to 70% of the cases ($\alpha = .05$, $\beta = .05$). The observed percentages of correct prediction within a tolerance band, of $\pm$ 15 arithmetic AQ points was 60%. Within this tolerance band, we can expect to predict correctly in 50% to 70% of the cases ($\alpha = .05$, $\beta = .05$). If these results were obtained by a worker in a similar setting with a larger sample, the utility of the Stanford-Binet as a predictor of academic achievement would be more firmly established.

No significant results were noted when the following predictor variables were checked against the predicted academic variables, i.e., reading, spelling, and arithmetic: The Vineland Social Maturity Scale, rating of organic signs, rating of

test adjustment, rating of emotional adjustment to home situation, and the rating of physical status. The statistical technique used for the first two variables was the contingency coefficient and the chi-square was used for the last three items. Although these results were not significant, a few trends were of interest, and may be worth noting possibly as leads for further research.

1. Moderate ratings on test adjustment showed a non-significant but consistent positive relationship with the academic achievement quotients. The proportion of individuals above the median on academic achievement was higher for those with moderately high adjustment ratings than for those with either high or low adjustment ratings.

2. In regard to the visual, auditory, and motor functions, those individuals with moderate disability showed a non-significant but consistent positive relationship with academic efficiency quotients. The proportion of individuals above the median on the AEQ was higher for those with moderate disability ratings than for those with either high or low ratings. In regard to speech, approximately the same number of individuals with moderate disability fell below the AEQ as above it.

3. When individuals with extreme ratings on organic signs were compared in regard to IQ, there was a trend showing organic signs to be negatively related to IQ. This was not significant, however, at $\alpha = .05$. None of the other ratings showed a noteworthy relationship with IQ.

Although the major purpose of this study was not to deal with the issues of stability of IQ or certain aspects of the validity issue, i.e., relationship of two psychological instruments, the data were available and therefore reported. The Pearson product moment correlation between the Stanford-Binet and the Full Range Vocabulary Test during the first testing session was .89, the correlation between the Stanford-Binet which was given in the first testing session and the Full Range Picture Vocabulary given from one year, seven months to nine years, ten months later was .80.

Summary

A sample of 46 brain injured children (average age five years, four months) was given a battery of psychological tests, and in addition, ratings were obtained based on test adjustment, presence of qualitative signs related to brain damage, general emotional adjustment, social maturity and physical status (motor efficiency, speech, vision and hearing). Patients were retested from one year, seven months to nine years, ten months later (average interval five years, two months), and a measure of their academic status in the basic skills of reading, spelling, and arithmetic was obtained.

The value of the above ratings and the Stanford-Binet IQ for predicting academic achievement was estimated either by chi-square or by the method of sequential analysis. Despite the numerous criticisms about the use of the Stanford-Binet with brain injured children, it was the only variable which could predict academic achievement. None of the other factors which had been thought to be related to academic achievement, i.e., social adjustment, test adjustment, organic traits, emotional adjustment, and physical status were of any value.

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Observations
Concerning Bone Conduction Audiometry

RICHARD A. HOOPS
E. THAYER CURRY

BONE conduction pure frequency audiometry is of great importance in diagnostic procedures. The presence or absence of a difference between air conduction thresholds and bone conduction thresholds is the primary bit of information used to differentiate sensori-neural impairment from conductive involvements. There is, however, great uncertainty as to the reliance or validity with which these measures can be regarded.

Feldman (1961) has recently considered several of the variables involved in bone conduction testing, particularly dealing with the amount and type of masking to use when testing for unilateral hearing loss, the type of earphone utilized to deliver the masking noise, and the position of the vibrator. Feldman stated that thresholds derived with bone vibrator at the forehead were some 10 db less acute than those obtained with the vibrator on the mastoid process.

The purpose of this article is to discuss some results obtained in research conducted by Hoops (1961), which considered various positions of the vibrator, as well as various pressures of the vibrator against the skull, to see if the conclusion reached by Feldman in regard to position of the vibrator can be applied in general public school or clinical audiometric testing. These results will be compared to those obtained in a recent doctoral study by Studebaker (1959) and observations by Kirikae (1959) and Naunton (1957).

Procedure

Hoops (1961) devised a headband whereby the bone vibrator could be moved to certain spots on the skull and various pressures could be applied by the vibrator against the skull. Twenty subjects, ten normal hearing and ten hard of hearing, were utilized. All measurements were obtained with a Beltone 10-A audiometer equipped with a Sonotone E-6 bone vibrator and were derived with subject and experimenter both seated in an acoustically-

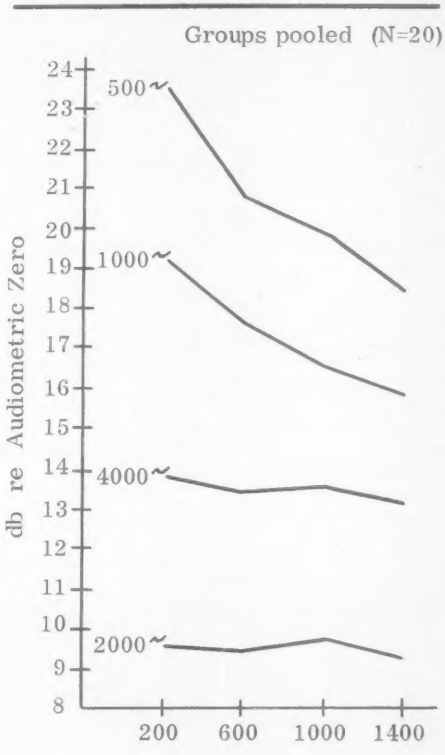

Figure 1. Mean Thresholds in db for each Frequency at each Tension

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treated room with a mean ambient noise level of 36 db. A standard audiometric procedure was utilized. Variables controlled were the position of the vibrator, pressure of the vibrator against the skull, frequency utilized for testing, repetition of testing, order of testing, and interactions between and among these factors. Four positions of the receiver were utilized at random on each of four days, and at each position, sixteen thresholds were obtained at random for each subject, using the combinations of frequency and pressure of the vibrator against the skull.

Positions: The four positions utilized were the forehead, the hump of the mastoid process, and two other locations on the mastoid, one inch superior and one inch posterior to the hump.

Pressures: The pressures used were 200, 600, 1000, and 1400 grams.

Frequencies: Thresholds were obtained at 500, 1000, 2000, and 4000 cycles per second.

The data were analyzed by preparation of an analysis of variance, as described by Federer (1955).

The results discussed herein are summarized from portions of Hoops' (1961) earlier report.

Results

Position: Mean thresholds were more acute at the mastoid location, agreeing with the findings of other researchers. Both groups of subjects responded in the same manner to variations in vibrator placement. These mean thresholds are presented in Table 1 as differences in mean acuity from the point of greatest acuity. A general trend can be observed from the values in Table 1, in that the mastoid-forehead difference is much greater at the lower frequencies tested than at the higher frequencies.

Thresholds obtained from various selected locations on the mastoid process varied over a range of 1 to 4 db, with most differences being 2 or 3 db. The magnitude of these differences probably has little clinical meaning.

Table II presents these differences in another form, comparing the threshold differences obtained in Hoops' study to those observed by other experimenters.

Pressure: Thresholds at the four frequencies at each of the four pressures of the vibrator, with positions pooled, are presented graphically in Figure 1. Increasing the pressure of the vibrator improved threshold at the low frequencies, but did not do so at the high frequencies. This relationship was true of both groups, and was also true at all positions. The mean improvement in threshold from 200 grams pressure to 1400 grams pressure was 5.07 db at 500 cps, 3.20 db at 1000 cps, .46 db at 2000 cps, and .89 db at 4000 cps.

Table 1

Mean Thresholds in db for each Frequency at each Position, from point of Greatest Acuity, Tensions Pooled

Group	Position			
	Mastoid hump	One inch post. hump	One inch sup. hump	Forehead
Groups pooled(N=20)				
500 cps	0	2.49	2.96	11.16
1000	0	2.90	1.19	4.63
2000	0	1.40	.55	5.23
4000	0	3.88	.87	.59
Hard of hearing group (N=10)				
500 cps	0	3.50	1.41	9.32
1000	0	3.54	1.10	3.46
2000	0	4.04	1.37	7.21
4000	0	3.72	1.75	2.13
Normal hearing group (N=10)				
500 cps	0	1.47	4.51	12.99
1000	0	2.27	1.29	5.71
2000	1.23	0	.96	4.49
4000	.96	4.00	.95	0

Table 2
The Threshold-Mastoid Differences at Various Frequencies reported by Various Experimenters

Frequency (cps)	db Difference						
	Kirikae	Studebaker		Naunton	Hoops		
	*	**	*	*	**	*	***
500	15-25	14.8	10.4	8	12.99	9.32	11.16
1000	5-15	9.7	7.2	5	5.71	3.46	4.63
2000	5-15	9.4	6.3	4	4.49	7.21	5.23
4000	5-10	5.2	3.0	-1	-.96	2.13	.59

*=hard of hearing subjects
**=normal hearing subjects
***=both groups combined

Discussion

The differences reported by Hoops between thresholds obtained with forehead and mastoid placement agree in general with the results obtained by other experimenters. The difference is approximately 10 db at the lower frequencies (such as 500 cps) and tends to become obviated with increasing frequency. At 4000 cps, there is very little, if any, difference between thresholds obtained from the mastoid and the forehead. The primary conclusion which might arise from these observations is that at low frequencies, considerable threshold variation can be induced by placing the vibrator at different positions, but at high frequencies (such as 4000 cps), it makes very little difference where the vibrator is placed.

Insofar as pressure of the vibrator against the skull is concerned, the same observation would seem to obtain. Increased pressure at 2000 and 4000 cps produces almost no change whatsoever in mean thresholds at any position, but can produce as much as 5 db difference at lower frequencies. This amount of threshold variation at low frequencies was obtained with all four positions of the vibrator.

Summary

If a capsule summary of the problems of bone conduction threshold audiometry were attempted, based on the results discussed herein, it might read as follows: Bone conduction thresholds at low frequencies are influenced not only by the inherent sources of variation which act upon any measurement, but also by such factors as the pressure exerted by the vibrator against the skull and the positioning of the vibrator. Bone conduction threshold measurements at higher frequencies, such as 4000 cps, are relatively more stable, and neither the pressure nor the position of the vibrator provides great variation.

The following suggestions are extended to public school and clinical personnel administering bone conduction audiometric tests at low frequencies, such as 500 and 1000 cps:

- Use a tight fitting headband to hold the bone vibrator.
- Specify whether the thresholds were recorded with mastoid or forehead placement.
- Specify the type of audiometer and type of bone vibrator utilized to obtain these thresholds.

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Oklahoma's Optical Aids Clinic

ROBERT W. KING
JERRY DUNLAP

In a continuing effort to provide more complete restorative service to Oklahoma's visually handicapped citizens, the Division of Vocational Rehabilitation of the State Board of Vocational Education, in co-operation with the Oklahoma School of Medicine, established an Optical Aids Clinic in April, 1958. This clinic, which is located in the Oklahoma University Medical Center, is designed for the fitting and prescription of aids now available to improve the visual efficiency of persons with low vision or those who are currently classified as blind.

Historically, the term "blindness" has been applied to totally blind persons. Today, however, this term applies to those with central visual acuity not exceeding 20/200 in the better eye with correction, or central acuity greater than 20° or less. Since the partially sighted do not comprise a significantly large segment of our society, there has been a tendency to overlook the needs imposed by their handicap. However, in recent years, there has been a concerted effort by ophthalmologists, optical companies, and agencies for the blind to improve this situation through research in the use of special microscopic and telescopic lenses. Some of the results achieved through use of optical aids are revolutionizing thinking about the employment and education of visually handicapped individuals.

The Oklahoma clinic is a culmination of intensive study and observation of similar programs in other states and is the result of joint planning between medical and rehabilitation personnel. Primarily, there are five sources of patient referrals: Veteran's Administration, University Medical Center Eye Clinic, Special Education Classes of Public Schools, State Division of Vocational Rehabilitation, and private ophthalmologists. Although this is a specialized program, it is seen as an integral part of the education and rehabilitation process.

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Defining Optical Aids

The term " optical aids" means devices and lenses other than those normally prescribed by eye practitioners in their regular practices. Specifically, we consider optical aids to be the microscopic, telescopic, and aspheric lenses, binoculars, telescopes, and hand magnifiers. Several clinics have reported that a significant portion of their cases can be fitted with standard glasses. Our clinic experience corroborates this fact with prescriptions being approximately equal between aids and glasses.

Some of the general impressions which have been gained during the two year clinic experience should be of interest to the reader. First, patience and understanding are required by both the physician and patient during the optical aids examination. Also, it has been found that because of the tedious word-by-word reading, younger individuals adapt more rapidly than do older people. This factor accounts for a higher percentage of failures in the older age group who do not wish to change lifelong habits of reading. Those individuals with a recent onset of visual loss also present adjustment problems because of the yet remaining hope that some miraculous surgery or medicine will return their lost vision. It is common for newly blinded individuals to be reluctant to accept any correction that does not completely restore normal functioning. Assistance often can be given for distant vision as well as for near, but each case must be studied individually.

"Sight saving" and "sight conservation" are two terms which are associated with this group of individuals and, at times, have a direct influence upon their fear of losing their remaining vision. These people must be reassured and convinced that using their eyes will do them no harm. "Sight saving" and "sight. conservation" are well used in other aspects of protective programs for the public; how-

ever, these expressions are poorly chosen for use with those of limited vision. In regard to work with the partially sighted, we should probably change to the positive approach by adopting the term "Sight Utilization" programs. Another facet of this problem has existed in working with children. Any individual with subnormal vision has to bring the material close until the image is large enough to permit reading. However, many parents and teachers have the strongly instilled belief that it is dangerous to the child's eyes to hold the material so near. Consequently, the child is often instructed to move the reading farther out and he immediately becomes confused as the print is no longer clear.

Clinical Statistical Data

A brief resume of statistical data will provide a clearer picture of the nature and scope of the optical aids program in Oklahoma. In the first two years of this clinic, 180 patients have been examined. Each of these individuals was referred following a complete eye examination by an ophthalmologist. This group is quite varied in regard to such factors as age, race, educational and vocational achievements. Of the patients examined, aids or glasses were prescribed for 148. Eight could be given reading vision, but were unable to adjust to the lenses. Six had sufficient vision for their work and no additional aids were prescribed. In this category will be those who will have to return at a later date when their failing accommodation will make it necessary. Eighteen could not be helped. This represents 82 percent being helped which is in line with other studies. However, it should be observed that careful screening by the referring ophthalmologist greatly affects this percentage.

One gratifying result that should be of special interest to the teacher is the fact that many younger children have been helped to stay in school and complete their education as a direct result of the increased vision achieved through the proper use of optical aids. The findings of this survey indicate that many persons with low vision drop out of school between the fifth and eleventh grades. The reason for this high percentage of drop-outs is lost visual accommodation. As long as the student has sufficient accommodation to bring reading close enough to do the work, he seems to be able to stay in school. Due to normal growth processes, this accommodation is generally lost within the above specified age range. There have been several students who went from the School for the Blind or Sight Saving Classes into the public school system or on to college campuses without special reader assistance following the trial and use of optical aids. These instances point to the need for early and complete ophthalmological examinations of children with sub-normal vision.

In conclusion, a word of caution may be necessary. The reader might have the impression from the foregoing discussion that optical aids are a panacea for all problems of vision. Unfortunately, this is not the case. In some instances, publicity of these devices has been exaggerated to the extent that many people feel that these aids will permit near normal visual activities such as driving a car. Rarely does a correction rehabilitiate anyone to see at all distances, to walk in the street wearing the aid, or to read normally at sixteen inches. However, it it true that in certain instances, a person's visual capabilities need no longer be measured by his ability to read a Snellen or Jaeger Chart, but is more closely associated with his ability to utilize whatever retinal elements are yet functioning.

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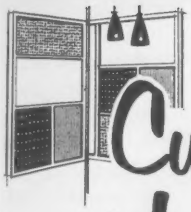

Current Literature

Sign Language Structure: An Outline of the Visual Communication Systems of the American Deaf. Stokoe, William C., Jr. Buffalo: Studies in Linguistics: Occasional Papers, 8, Department of Anthropology and Linguistics, University of Buffalo, 1960. 78 p.

It was bound to happen eventually. It was bound to happen—that is, someone would come along to utilize the methods of contemporary scientific linguistic analysis to describe a system of communication distinct from that of ordinary vocal language and its derivative, the writing system, but sufficiently language-like to make the use of these methods possible and fruitful. It is fortunate that the system of communication which came to be described in this way in the present monograph, at least in outline, is the sign language of the American deaf, and that the person who set himself this task was Dr. Stokoe. Not only is this monograph a landmark event in the history of communication studies, it is also a brilliant piece of work and one that holds promise of being helpful in the education of the deaf. In preparing to make this study, Dr. Stokoe spent several months at the University of Buffalo familiarizing himself with the methods of linguistic analysis as they have been developed especially by Professors George Trager and Henry Lee Smith, Jr.

This reviewer, who has no first-hand acquaintance with the sign language of the deaf, can evaluate Dr. Stokoe's monograph only as an essay in the analysis of a communication system. But the reader of this review, who will in all probability have considerable knowledge of sign language, perhaps needs to be informed briefly concerning how ordinary language is analyzed in contemporary linguistics.

Basically, the first aim is to arrive at an identification of the fundamental units of speech sound, called phonemes, which differentiate the words and the other lexical elements of a language system. For example, if we consider the series of words *bit, chit, fit, hit, kit, lit, mit, nit,* etc., we note that they differ only with respect to their initial sounds; consideration of this and other series of words can eventually lead to the isolation of the series of phonemes (symbolized /b, č, f, h, k, l, m, n,. . .(etc.)/) which function in English. The phoneme is a linguistic unit which has what Sapir called its own "psychological reality" because even though it may be uttered in slightly different ways on different occasions or in different contexts it nevertheless is perceived as a constant element by speakers of the language. Phonology is the term used to refer to the analysis of the phonemic system of a language. When phonemes vary in predictable ways depending upon their phonetic environment, they are said to occur as different allophones; for example, the phoneme /k/ is actually pronounced somewhat differently, in English, depending upon what vowel follows it.

Morphemes, the smallest elements of language which are meaningful in their own right, are composed of phonemes strung together sequentially. For example, the morpheme *bit* is composed of the phonemes /b/, /i/, and /t/. Morphemes are of two main varieties: *free* morphemes, lexical elements like *bit, eat, pencil,* etc., which are not further analyzable into smaller lexical elements; and *bound* morphemes, meaning-bearing prefixes and suffixes such as un-, -less, -er (agentive suffix), *-s* (pluralizing suffix), *-s* (present tense third person singular marker), etc. Words like unthinkable, remakes, and exmanagers are composed of strings of morphemes, and morphology is the branch of linguistic analysis which describes the composition of such strings. Morphophonemics is the name given to the study of the ways in which morphemes vary in their phonemic composition, as where the pluralizing morpheme *-s* takes different forms (/-s, -z, -iz/) depending upon what it follows (as in *bees, beets, beads, beeches*). The ways in which morphemes and words are strung together in complete "grammatical" utterances are described in the morphology and syntax of the language.

Linguistic analysis, besides being a valuable

scientific activity in its own right, is considered to be valuable in language teaching because it gives a clear specification of what is to be taught.

After giving what appears to be an excellent brief history of the attempts to study and analyze the sign language of the deaf over the last two centuries, including reference to the work of Abbé De l'Epée, Sicard, Clerc, and Gallaudet, Stokoe undertakes his task of applying the methodology implied by the terms phoneme and morpheme. The bulk of his paper is concerned with the analysis of what in the sign language of the deaf corresponds to phonology in the language of normal speakers. Analysis of the morphology and syntax of sign language is touched only briefly and is reserved for a later monograph.

The manual alphabets used for some purposes by most deaf persons are not the concern of this monograph. Stokoe gives a brief description of the American manual alphabet and uses it at certain points to clarify the later discussion, but he proceeds forthwith to give major attention to "sign language" proper, a language which has its own, non-alphabetical units and patterns.

In the linguistic analysis of sign language, Stokoe's first task was to establish a set of terms corresponding to phonology, phoneme, allophone, and morphophonemics. From the Greek root cheir-, "hand," he formed the terms cherology, chereme (to be pronounced kériym), allocher, and morphocheremics. (It might have been expected that the combining form would be *chiro-* after the analogy of chiropody, chiropractor, etc., but this is a minor detail).

The next task was to isolate the cheremes. Though the author does not inform the reader exactly how he arrived at his analysis, he must have proceeded as any linguist would in identifying the phonemes of a new language—by noticing recurrent and discriminating features of utterances—or the analogue of utterances in sign language. The sign-morphemes, like syllables, were seen to be composed of cheremes, but the cheremes are not produced sequentially as in spoken syllables but simultaneously. Three varieties of cheremes are distinguished, corresponding to three aspects of the formation of a hand-sign: its position (i.e., location relative to other parts of the body), its configuration, and its motion. The words tabula, designator, and signation (shortened to tab, dez, and sig) were chosen to refer to these three aspects.

It may help the reader to note that phonemes also come in several varieties, consonants, vowels, and semivowels, but there is no direct correspondence between these varieties and the three varieties of cheremes. But the analogy is close enough to draw attention to the fact that just as certain sounds, /y/ for example, can function both as a consonant or as a semivowel, it also turns out that in sign language certain sign elements function sometimes as tab, sometimes as dez. Stokoe lists twelve symbols for notating elements which occur only as tab, fifteen symbols for notating elements which occur as dez and also sometimes as tab, and twenty symbols for notating cheremes which occur as sig. The total number of cheremes is roughly comparable, it would appear, to the number of phonemes in natural language— somewhere between 20 and 60 in most languages.

The chapter on morphocheremics is devoted to a discussion of the ways in which sign-morphemes are composed of cheremes. Each sign is conventionally notated in the order tab, dez, and sig, it being understood that these three aspects are actually signed simultaneously. Some of the material in this

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chapter might have been better assigned to the chapter on morphemics, for it includes some discussion of word derivation and compounding, ordinarily considered under morphology in standard linguistic descriptions. According to the writer, American sign language "has or had until recently a large toleration for compound or complex signs" (p. 56), a toleration which seems to have originated in the "methodical" signs invented by l'Epée (1776) for denoting number, gender, tense, and other grammatical meanings.

Similarly, the chapter on morphemics does not deal wholly with morphemics proper, but points ahead to various syntactical problems. For example, it is noted that "one of the first features to emerge . . . is that on the syntactical level other signals than the aspectual cheremes are operating" (p. 61). One of the commonest of these is a gesture, the shake of the head, which of course is familiar to most speakers of normal English as a sign of negation. Such additional signals may be regarded as analogous to intonations, stresses, and other "suprasegmental" phonemes which accompany normal speech.

As noted previously, the major concern of this monograph is with the development of the "cherology" of sign language, and the chapters on morphocheremics and morphemics are certainly less detailed than they would need to be in a full treatment. It is apparent that sign language is an enormously rich and complex communicative system, probably containing some thousands or ten thousands of sign-morphemes and a complex set of grammatical rules. At least, this is the reviewer's inference from the general characteristics and examples which are given in the monograph. It would have been helpful for Stokoe to have included a brief "text" in sign-language so that the reader unfamiliar with sign-language would get a better idea of its nature. The monograph closes with a useful glossary of terms, a table of cherological symbols, and a 44-item bibliography.

For the communication specialist, this monograph provides an exceedingly good example of the application of linguistic method to a non-linguistic communication system. For the teacher of the deaf, it should provide a highly practical and useful system for transcribing sign language and identify-

ing its components. It will repay careful study from this point of view, and one may hope that it will be followed by a treatment of the grammar and lexicography of sign language *in extenso.*

An interesting side-light, to this reviewer, is the fact that there appears to be a considerable amount of mutual intelligibility between the sign languages of the various civilized nations.—
John B. Carroll, Graduate School of Education, Harvard University.

New Publications List

EDITOR'S NOTE: The following published materials have been received recently at Council headquarters. There has been no opportunity to evaluate and review them. They are presented here, with prices and addresses included where possible, for your information. These publications are not available from CEC.

Mental Retardation. Rothstein, Jerome H. New York: Holt, Rinehart and Winston, Inc., 383 Madison Avenue, New York 17, 1961. 628 p. ($6.75).

Reeducation of Disturbed Children. Project Re-ED, George Peabody College for Teachers, Nashville, Tennessee, 1961. 13 p.

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Phenylketonuria. Centerwall, Willard R. & Centerwall, Siegried A. Washington, D.C.: U. S. Department of Health, Education, and Welfare, Social Security Administration, Children's Bureau, No. 388, 1961. 28 p. ($.15). Available from Superintendent of Documents, U. S. Government Printing Office.

Speech and Language Training for the Cerebral Palsied Child at Home. Shere, Marie Orr. Illinois: The Interstate Printers and Publishers, Inc, Jackson at Van Buren, Danville, 1961. ($1.00).

Outlook for the Adult Retarded. Proceedings of the 1960 Woods Schools Conference held in cooperation with the Mass. Special Commission on Retarded Children. Massachusetts: Mass. Mental Health Center, 74 Fenwood Road, Boston. 123 p. ($1.00).

Factors Associated With Underachievement and Overachievement of Intellectually Gifted Children. Karnes, Merle B., et. al. Illinois: Board of Education Community Unit School District No. 4, Champaign. ($2.00). Also available from Champaign Public Schools.

Adapting Materials for Educating Blind Children With Sighted Children. The University of the State of New York, State Education Department, Bureau for Handicapped Children, 1961. 40 p. ($1.00).

My Speech Book, Talk Talk Talk, Say and Do, Talk About It. Sisters of St. Francis of Assisi. Wisconsin: The Sisters of St. Francis of Assisi, St. John's School for the Deaf, 3680 South Kinnickinnic Avenue, Milwaukee 7, 1961. 44 p., 44 p., 49 p., 44 p.

The Mentally Retarded and their Vocational Rehabilitation. Fraenkel, William A. New York: National Association for Retarded Children, Inc., 386 Park Ave. South, New York 16, 1961. 87 p.

A Lipreader Must Practice. Copeland, Medary Rieke. Washington, D. C.: Alexander Graham Bell Association for the Deaf, Inc., 1537 35th St., N.W., 1961. ($1.55).

Teaching Arithmetic to Deaf Children. O'Neill, Veronica. Washington, D. C.: Alexander Graham Bell Association for the Deaf, Inc., 1537 35th St., N.W., 1961. $(3.20).

My Speech Workbook—Book I—A Remedial Workbook for the "S" and "Z" Sounds. Parker, Jayne Hall. Illinois: The Interstate Printers & Publishers, Inc. Danville, 1961. 151 p. ($2.00).

A Study of the Effects of Community and Institutional School Classes for Trainable Mentally Retarded Children. Cain, Leo F. & Levine, Samuel (Co-Directors). San Francisco: San Francisco State College, 1961. 244 p.

Attitudes Toward Children of Subnormal Intelligence. Masterman, Louis E. Missouri: Community Studies, Inc., Kansas City and the State Division of Health of Missouri, Jefferson City, Publication 133., 1961. 46 p.